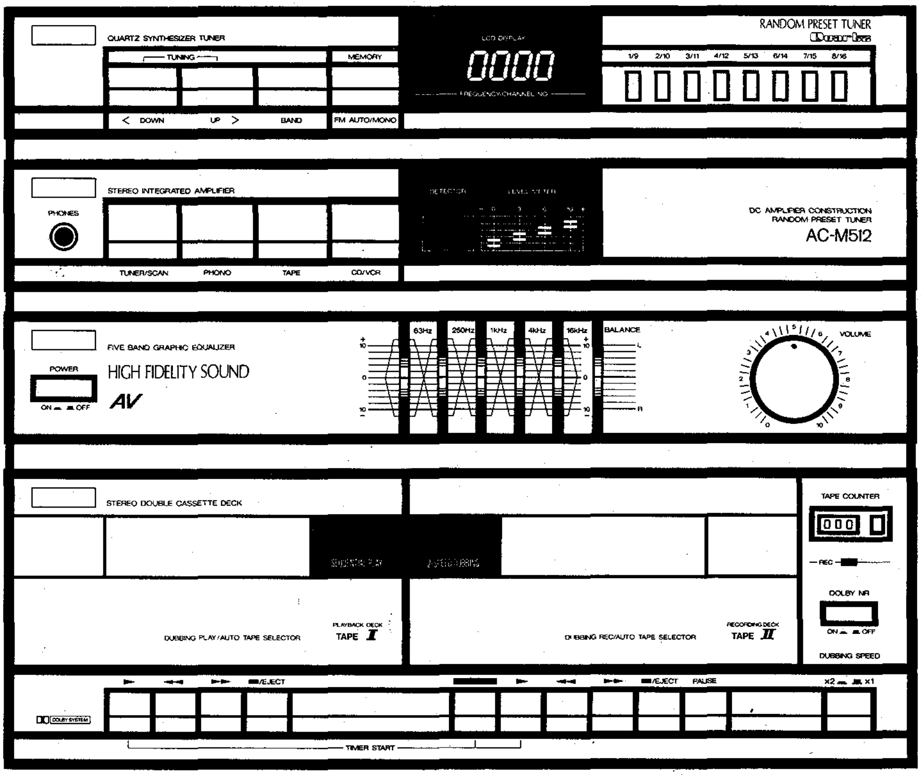
AC-M312/L
AC-M512/L

# AKAI SERVICE MANUAL


QUARTZ SYNTHESIZER TUNER
TUNING
MEMORY
LCD DISPLAY
0000
FREQUENCY/CHANNEL NO.
RANDOM PRESET TUNER
1/9 2/10 3/11 4/12 5/13 6/14 7/15 8/16
DOWN
UP
BAND
FM AUTO/MONO
STEREO INTEGRATED AMPLIFIER
PHONES
TUNER/SCAN
PHONO
TAPE
CD/VCR
DC AMPLIFIER CONSTRUCTION
RANDOM PRESET TUNER
AC-M512
FIVE BAND GRAPHIC EQUALIZER
POWER
ON OFF
HIGH FIDELITY SOUND
AV
63Hz
250Hz
1kHz
4kHz
16kHz
BALANCE
VOLUME
STEREO DOUBLE CASSETTE DECK
TAPE COUNTER
REC
DOLBY NR
DUBBING PLAY/AUTO TAPE SELECTOR
PLAYBACK DECK
TAPE I
DUBBING REC/AUTO TAPE SELECTOR
RECORDING DECK
TAPE II
DUBBING SPEED
EJECT
PAUSE
x2 x1
DOLBY SYSTEM
TIMER START

MODEL AC-M512

## MIDI COMPONENT SYSTEM

## MODEL AC-M312/L
## MODEL AC-M512/L

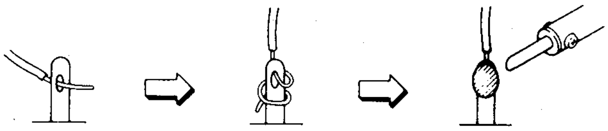
## COMPONENT

## MODEL AC-A510/L

# ★SAFETY INSTRUCTIONS

## PRECAUTIONS DURING SERVICING

1. Parts identified by the ⚠ symbol parts are critical for safety. Replace only with parts number specified..
2. In addition to safety, other parts and assemblies are specified for conformance with such regulations as those applying to spurious radiation.
   These must also be replaced only with specified replacements.
   Examples: RF converters, tuner units, antenna selector switches, RF cables, noise blocking capacitors, noise blocking filters, etc.
3. Use specified internal wiring. Note especially:
   1) Wires covered with PVC tubing
   2) Double insulated wires
   3) High voltage leads
4. Use specified insulating materials for hazardous live parts. Note especially:
   1) Insulation Tape
   2) PVC tubing
   3) Spacers (Insulating Barriers)
   4) Insulation sheets for transistors
   5) Plastic screws for fixing microswitch (especially in turntable)
5. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.), wrap ends of wires securely about the terminals before soldering.



6. Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.).
7. Check that replaced wires do not contact sharp edged or pointed parts.
8. Also check areas surrounding repaired locatoins.
9. Use care that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

## SAFETY CHECK AFTER SERVICING

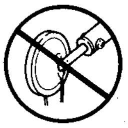
Confirm the specified insulation resistance between power cord plug prongs and externally exposed parts of the set is greater than 10 M ohms. but for equipment with external antenna terminals (tuner, receiver, etc.) and is intended for C or A, specified insulation resistance should be headphone jacks line-in-out jacks etc. more than 2.2 M ohms (ground terminals, microphone jacks).

## PRECAUTIONS FOR LITHIUM BATTERY

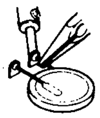
The lithium battery may explode when heated excessively.

[OBSERVE THE FOLLOWING WHEN REPLACING]

- Replace with the same make and type only.
- Use soldering iron in "recommended way" only.
- Place battery in correct polarity.
- Do not short the terminals.
- Do not recharge battery.
- Do not dispose of battery in fire.



〔DANGER〕



〔RECOMMENDED WAY〕

# ★INFORMATION

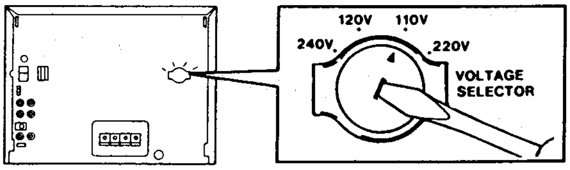
## SYMBOLS FOR PRIMARY DESTINATION

Alphabet indicates the destination of the units as listed below.

| Symbols | Principal Destinations |
|---|---|
| A | USA |
| B | UK |
| C | Canada |
| E | Europe (except UK) |
| J | Japan |
| S | Australia |
| V | W. Germany only |
| U | Universal Area |
| Y* | Custom version |

## VOLTAGE CONVERSION ( U Model only)

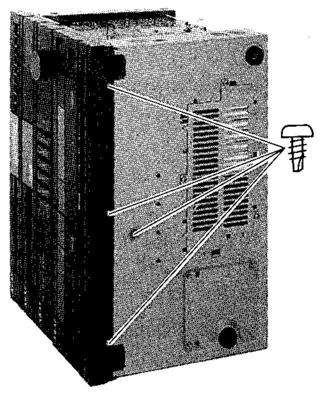
Before connecting the power cord. SET the VOLTAGE SELECTOR located on the rear panel with a screwdriver so that the correct voltage is indicated.



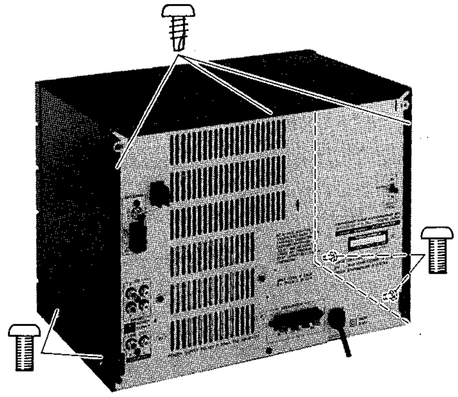
# II. DISASSEMBLY

In case of trouble, etc. necessitating dismantling, please dismantle in the order shown in the photographs. Reassemble in reverse order.

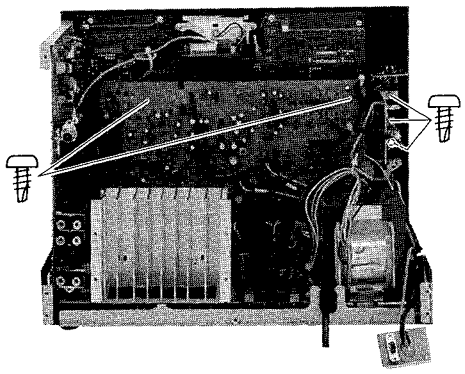
4



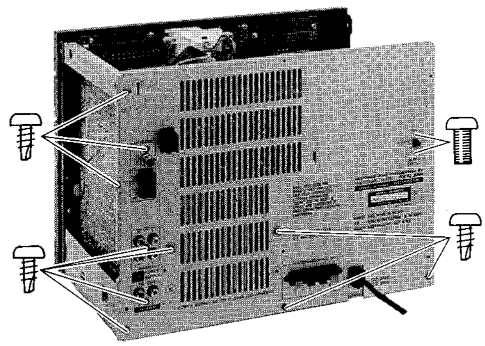
1 Removal of Upper Cover



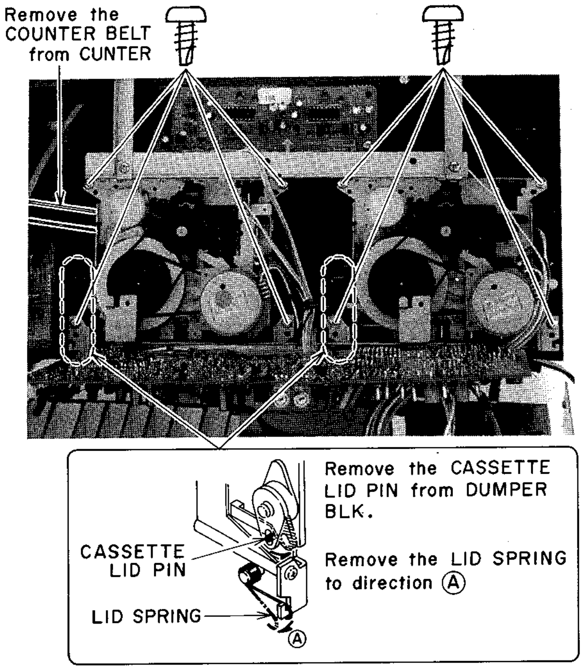
5 Removal of Deck PCB, Head Phone PCB. and Power SW PCB.



2 Removal of Rear Panel



6 Removal of Mecha BLK

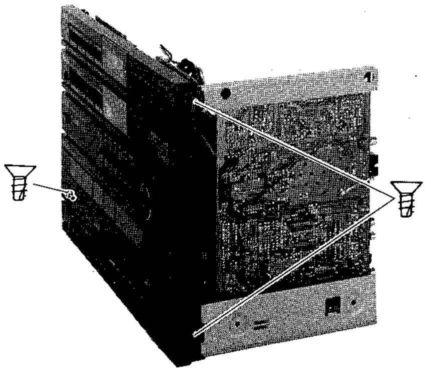


Remove the COUNTER BELT from CUNTER

Remove the CASSETTE LID PIN from DUMPER BLK.

Remove the LID SPRING to direction Ⓐ

3 Removal of Front Panel BLK.



# I. SPECIFICATIONS

## Amplifier Section

| MODEL | AC-M512/L | AC-M312/L | AC-A510/L |
|---|---|---|---|
| Power output (8 ohms) | | | |
| Rated (40 Hz to 20 kHz) | 50W/0.3% | 40W/0.3% | 50W/0.3% |
| By FTC (40 Hz to 20 kHz) | 50W/0.3% | 40W/0.3% | 50W/0.3% |
| By F. Norm (63 Hz to 12.5 kHz) | 55W | 40W | 55W |
| By DIN (1 kHz) | 55W | 45W | 55W |
| Music power (Both channels) | 250W | 190W | 250W |
| Power bandwidth (IHF, –3 dB, 8 ohms) | 10 Hz to 60 kHz (0.5%) | 10 Hz to 50 kHz (0.5%) | (10 Hz to 40 kHz (0.5%) |
| S/N (IHF-A) PHONO | 72 dB | | |
| CD | 90 dB | | |
| Channel Separation (1 kHz) | 55 dB | | |
| Damping factor (1 kHz, 8 ohms) | 30 | | |
| Imput sensitivity/Impedance | | | |
| PHONO | 4.5 mV / 47 kohms | | |
| CD | 300 mV / 47 kohms | | |
| Frequency response | | | |
| PHONO (RIAA, Deviation) | ±0.5 dB | | |
| CD | 5 Hz to 50 kHz –3 dB | | |
| Graphic equalizer control | | | |
| Type | 5 bands | | |
| Center frequency | 63 Hz, 250 Hz, 1 kHz, 4 kHz, 16 kHz | | |
| Control range | ±8 dB | | |

## Tuner Section

ALL MODELS

| FM tuner section | |
|---|---|
| Tuning frequency range | 87.5 MHz to 108.0 MHz |
| Usable sensitivity | 12.7 dBf |
| Quieting sensitivity | 19.2 dBf (Mono) |
| (S/N = 50 dB) | 40.2 dBf (Stereo) |
| Capture ratio | 2.0 dB |
| Selectivity (400 kHz) | 60 dB |
| Image rejection ratio | 50 dB |
| IF rejection ratio | 80 dB |
| Suprious rejection ratio | 80 dB |
| AM suppression | 50 dB |
| Sub carrier suppression ratio | 55 dB |
| S/N | 70 dB (Mono), 60 dB (Stereo) |
| T.H.D | 0.2% (Mono), 0.4% (Stereo) |
| Stereo separation (1 kHz) | 40 dB |
| Frequency response | 30 Hz to 15 kHz ±1.0 dB |

| AM tuner section | |
|---|---|
| MW | |
| Tuning frequency range | 531 kHz to 1,602 kHz |
| Usable sensitivity (Loop antenna) | 300 $\mu$V |
| Selectivity | 25 dB |
| Image rejection ratio | 40 dB |
| IF rejection ratio | 45 dB |
| S/N | 40 dB |
| T.H.D. | 1.0% |
| LW | |
| Tuning frequency range | 146 kHz to 353 kHz |
| Usable sensitivity (Loop antenna) | 800 $\mu$V |
| Selectivity | 30 dB |
| Image rejection ratio | 40 dB |
| IF rejection ratio | 45 dB |
| S/N | 35 dB |
| T.H.D. | 2.0% |

## Deck Section

ALL MODEL

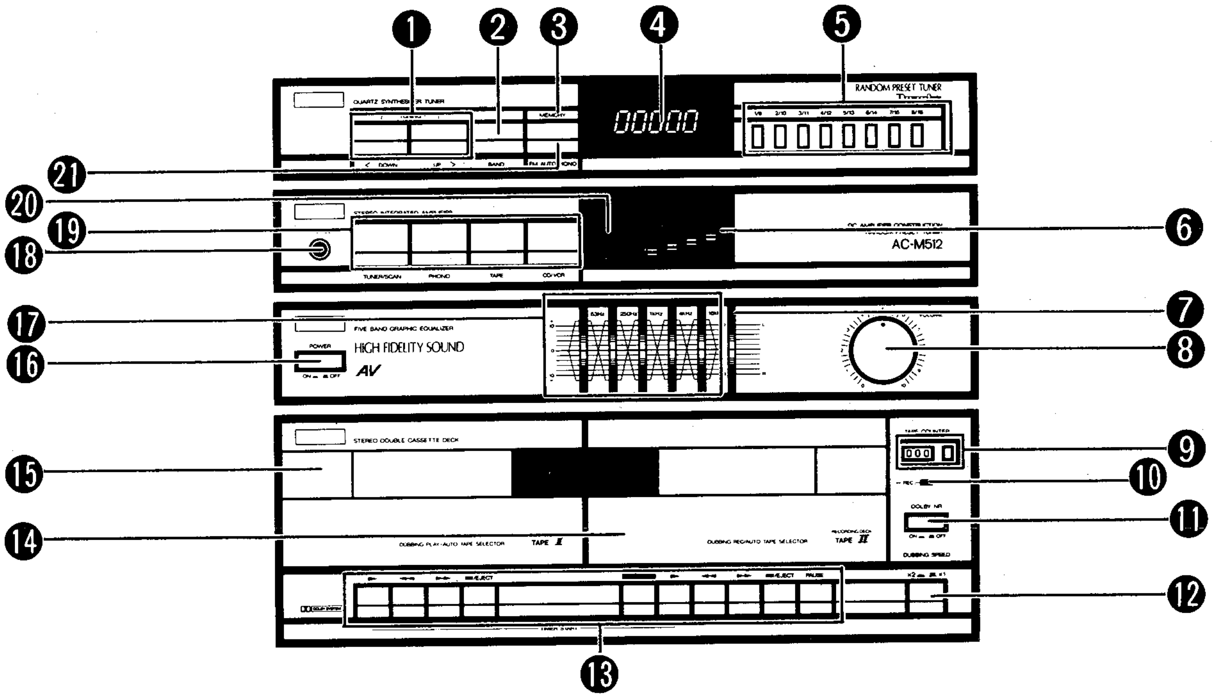
| | |
|---|---|
| Heads TAPE I | HD Head for Play back × 1 |
| TAPE II | HD Head for Recording/Play back × 1 |
| | Erase Head × 1 |
| Motors TAPE I | Electronically Speed Controlled DC Motor × 1 |
| TAPE II | Electronically Speed Controlled DC Motor × 1 |
| Frequency Response | |
| Normal | 30 Hz to 15 kHz ±3 dB |
| $CrO_2$ | 30 Hz to 15 kHz ±3 dB |
| Metal | 30 Hz to 16 kHz ±3 dB |
| S/N | 56 dB |
| Harmonic Distortion | 0.8% |

## Dimensions and Weight

| AC-M512/L | AC-M312/L | AC-A510/L |
|---|---|---|
| 350 (W) × 263 (H) × 235 (D) mm | 350 (W) × 263 (H) × 235 (D) mm | 425 (W) × 263 (H) × 246 (D) mm |
| 8.0 kg | 7.1 kg | 8.2 kg |

# III. CONTROLS

AC-M312/L, AC-M512/L


①
②
③
④
⑤
RANDOM PRESET TUNER
MEMORY
BAND
FM AUTO
MONO
⑥
AC-M512
TUNER/SCAN
PHONO
TAPE
CD/VCR
⑦
⑧
FIVE BAND GRAPHIC EQUALIZER
HIGH FIDELITY SOUND
AV
POWER
⑨
⑩
REC
⑪
DOLBY NR
⑫
DUBBING SPEED
⑬
⑭
⑮
STEREO DOUBLE CASSETTE DECK
TAPE I
TAPE II
⑯
⑰
⑱
⑲
⑳
㉑

① **TUNING DOWN (<)/UP (>) control**
To tune in a station manually.

② **BAND selector button**
To select the band.

③ **MEMORY button**
To memorize preset stations.

④ **LC (Liquid Crystal) Display**
Shows the tuning information.

⑤ **PRESET STATION buttons (1 to 16)**
To memorize preset stations and tune in memorized stations.

⑥ **LED LEVEL meter**
Indicates the left channel volume level.

⑦ **BALANCE control**
To adjust the left and right channel balance.

⑧ **VOLUME control**
To adjust the volume level.

⑨ **TAPE COUNTER and Reset button for TAPE II Deck**
Shows tape running numerical index for TAPE II deck.

⑩ **REC indicator**
Shows that TAPE II deck is in recording mode.

⑪ **DOLBY NR switch**
To turn on and off the DOLBY NR system.

⑫ **DUBBING SPEED Selector (AC-M512/L only)**
To select the tape dubbing speed.

⑬ **TAPE I and II Operation buttons**
Play (▶), Rewind (◀◀), Fast forward (▶▶) and Stop (■)/EJECT buttons. One touch REC and PAUSE buttons (TAPE II only)

⑭ **TAPE II cassette lid and holder**
To load a tape for recording and playback.

⑮ **TAPE I cassette lid and holder**
To load a tape for playback.

⑯ **POWER switch**
To turn on and off all the Akai Stereo System Components.

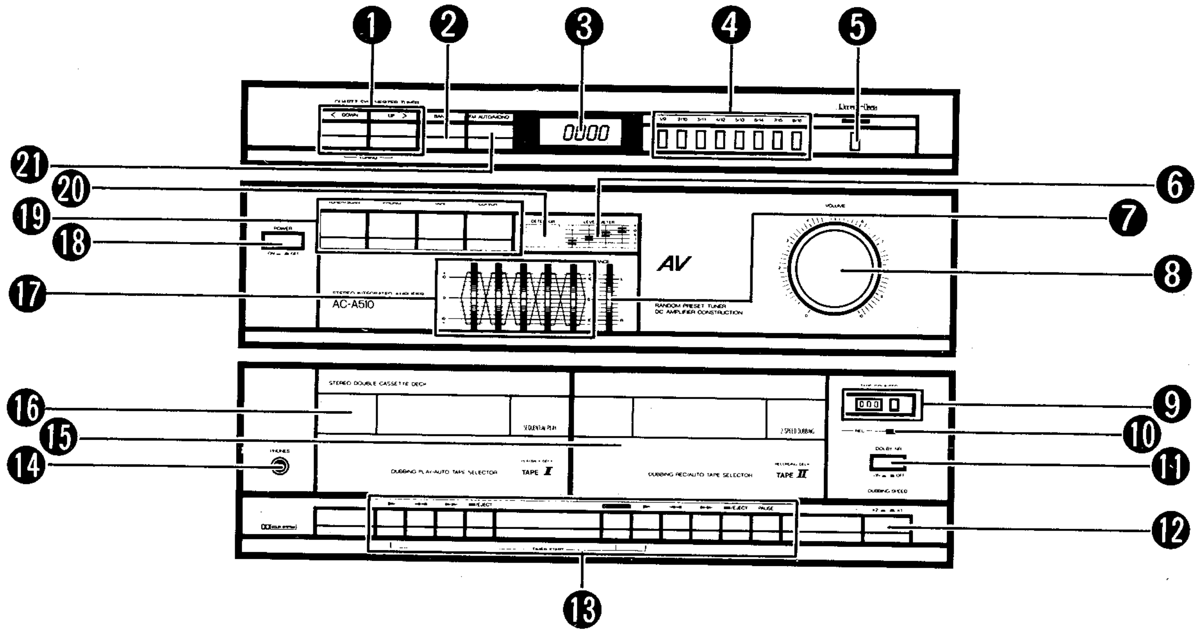
⑰ **GRAPHIC EQUALIZER controls**
To finely adjust the frequency levels between 63 Hz and 16 kHz during playback and recording operations (except tape dubbing).

⑱ **Headphones (PHONES) jack**
For headphone listening.

⑲ **Input source selectors and indicators (TUNER/SCAN, PHONO, TAPE and CD/VCR)**
To select an audio source or a preset station you want to listen to.

⑳ **REMOTE CONTROL Receiver window (AC-M512/L only)**
To receive a remote control signal from the standard accessory remote control unit.

㉑ **FM AUTO/MONO selector**
To select the FM AUTO or MONO mode.



**①** **TUNING DOWN (<)/UP (>) control**
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To select the band.

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Indicates the left channel volume level.

**⑦** **BALANCE control**
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To load a tape for recording and playback.

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To finely adjust the frequency levels between 63 Hz and 16 kHz during playback and recording operations (except tape dubbing).

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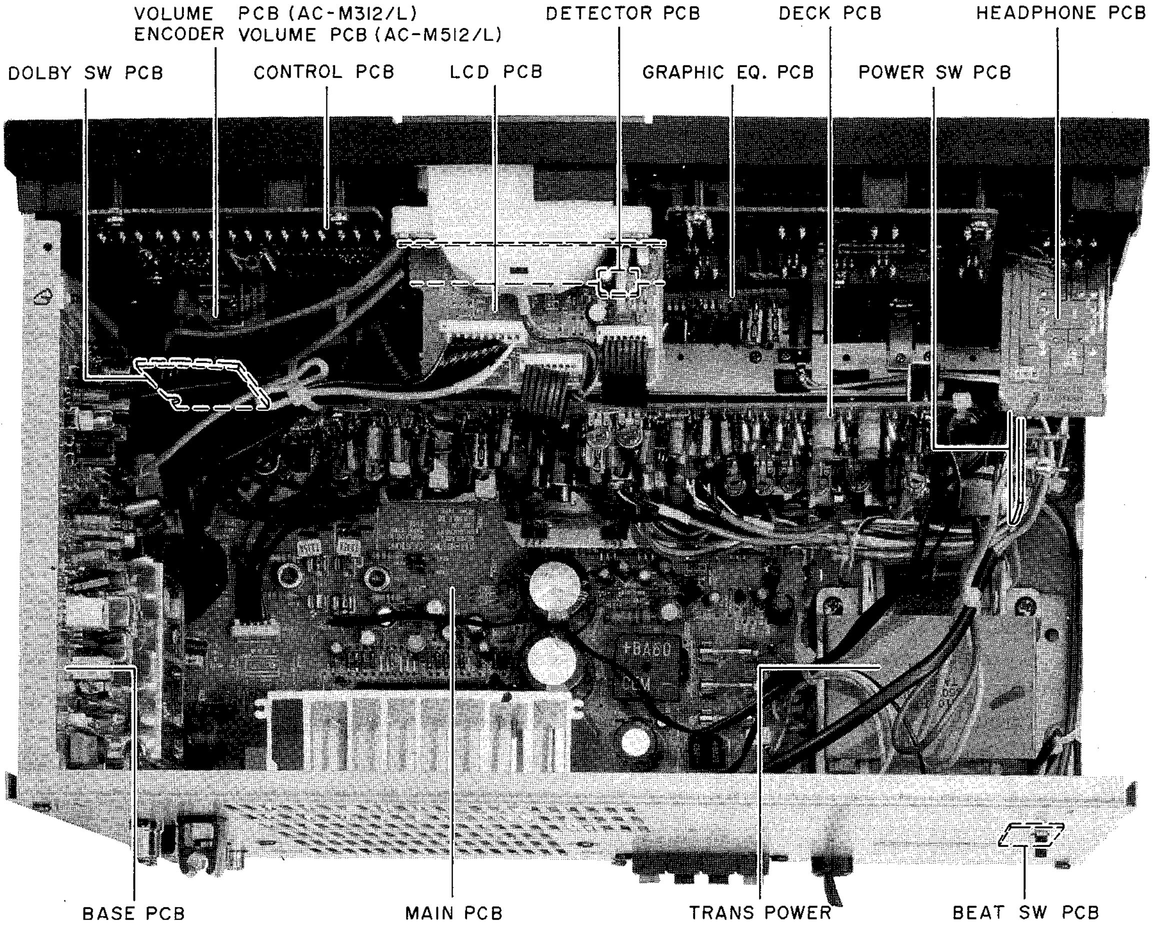
To receive a remote control signal from the standard accessory remote control unit.

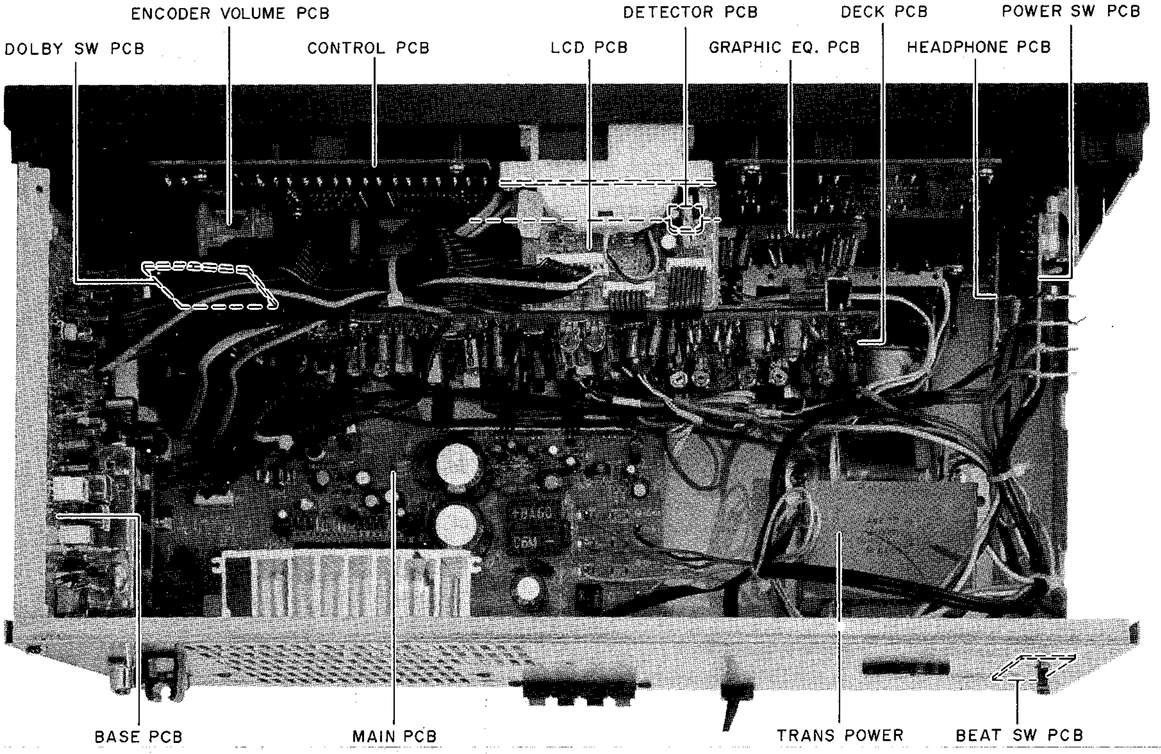
**㉑** **FM AUTO/MONO selector**
To select the FM AUTO or MONO mode.

# IV. PRINCIPAL PARTS LOCATION

## AC-M312/L, AC-M512/L


VOLUME PCB (AC-M312/L)
ENCODER VOLUME PCB (AC-M512/L)
DETECTOR PCB
DECK PCB
HEADPHONE PCB
DOLBY SW PCB
CONTROL PCB
LCD PCB
GRAPHIC EQ. PCB
POWER SW PCB
BASE PCB
MAIN PCB
TRANS POWER
BEAT SW PCB

## AC-A510/L


ENCODER VOLUME PCB
DETECTOR PCB
DECK PCB
POWER SW PCB
DOLBY SW PCB
CONTROL PCB
LCD PCB
GRAPHIC EQ. PCB
HEADPHONE PCB
BASE PCB
MAIN PCB
TRANS POWER
BEAT SW PCB

# V. ADJUSTMENT

### i) ·PINCH ROLLER PRESSURE MEASUREMENT

Put in PLAY mode. Push pinch roller arm down with the spring gauge, push the pinch Roller 1 to 2 mm away from the Capstan and release slowly.
Read the spring gauge at the moment the pinch roller touches the capstan and begins to rotate Specified contact pressure measurement of 150 to 300 grm. If these is no measurement obtained, replace the pinch roller spring.

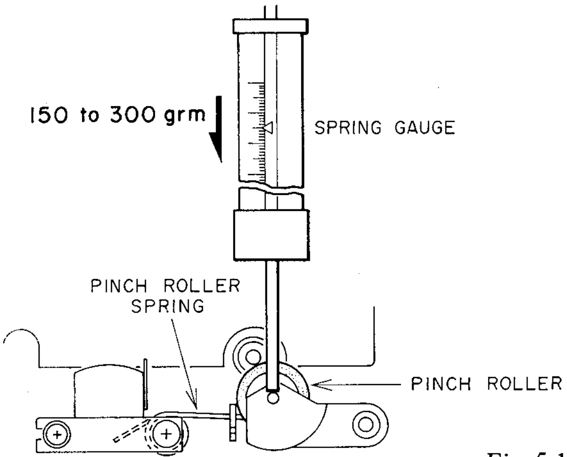

150 to 300 grm
SPRING GAUGE
PINCH ROLLER SPRING
PINCH ROLLER

Fig. 5-1

### ii) WINDING TORQUE MEASUREMENT IN EACH MODE

Insert cassette torque meter (AJ-751179) and measure in each mode. For Fast Forward and Rewind, measure at the end of tape when the tape has stopped running.

PLAY Mode

| | |
|---|---|
| Tape up Torque: | 35 to 75 grm-cm |
| Back tension torque: | 1.5 to 4.5 grm-cm |

FAST FORWARD, REWIND mode

| | |
|---|---|
| Tape up Torque: | 70 to 160 grm-cm |

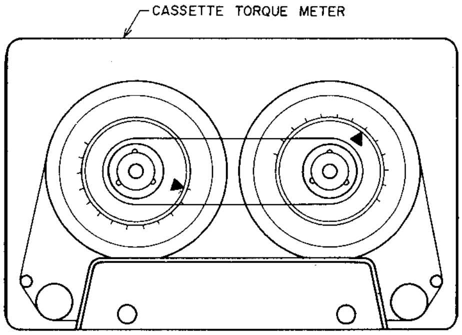

CASSETTE TORQUE METER

Fig. 5-2

## 5-2. INSTRUMENT CONNECTIONS

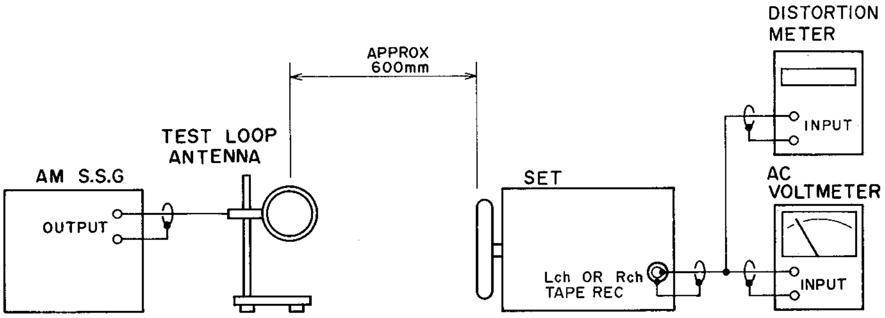

DISTORTION METER
INPUT
APPROX 600mm
TEST LOOP ANTENNA
AM S.S.G
OUTPUT
SET
AC VOLTMETER
Lch OR Rch TAPE REC
INPUT

Fig. 5-3 Instrument Connections for AM (MW, LW) Section Adjustment

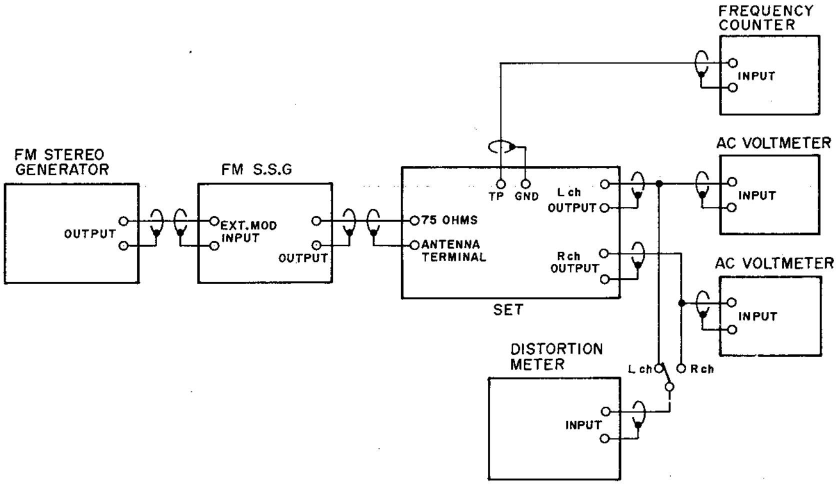

FREQUENCY COUNTER
INPUT
AC VOLTMETER
INPUT
FM STEREO GENERATOR
OUTPUT
FM S.S.G
EXT.MOD INPUT
OUTPUT
TP
GND
Lch OUTPUT
75 OHMS
ANTENNA TERMINAL
Rch OUTPUT
SET
AC VOLTMETER
INPUT
DISTORTION METER
Lch
Rch
INPUT

Fig. 5-4 Instrument Connection for FM Section Adjustment

## 5-3. TUNER ADJUSTMENT

**Step Adjustment Item**
1. SSG FREQ. & ATT.
2. SET Tuning FREQ.
3. Test Point & Adj. Part → ADJ. Part
4. Result & Remarks → Test Point

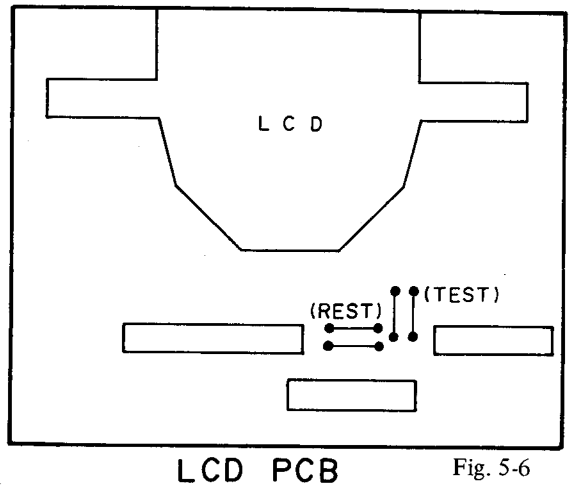
* HOW TO CALL THE PRESET FREQUENCY FOR THE TUNER ADJUSTMENT.

Short-circuit momentarily two test points shown Fig. 5-6. The select required test frequency by pushing one of the preset station button according to Fig. 5-6.

When the Tuner Adjustments are finished, reset the Preset frequency.

Short-circuit momentarily reset test point shown Fig. 5-6.

| | A, C, Y, U<br>10 kHz STP | E, V, B, S, U<br>9 kHz STP | L MODEL |
|---|---|---|---|
| 1ch | FM 88.00MHz | FM 88.00MHz | FM 88.00MHz |
| 2ch | FM 90.00MHz | FM 90.00MHz | FM 90.00MHz |
| 3ch | FM 98.00MHz | FM 98.00MHz | FM 98.00MHz |
| 4ch | FM 100.00MHz | FM 100.00MHz | FM 100.00MHz |
| 5ch | FM 106.00MHz | FM 106.00MHz | FM 106.00MHz |
| 6ch | FM 108.00MHz | FM 108.00MHz | FM 108.00MHz |
| 7ch | FM 95.70MHz | FM 95.75MHz | LW 160kHz |
| 8ch | FM 107.70MHz | FM 107.75MHz | LW 300kHz |
| 9ch | MW 530kHz | MW 531kHz | FM 95.75MHz |
| 10ch | MW 600kHz | MW 603kHz | MW 603kHz |
| 11ch | MW 1000kHz | MW 999kHz | MW 999kHz |
| 12ch | MW 1400kHz | MW 1404kHz | MW 1404kHz |
| 13ch | MW 800kHz | MW 801kHz | MW 801kHz |
| 14ch | MW 1300kHz | MW 1305kHz | MW 1305kHz |
| 15ch | MW 1610kHz | MW 1602kHz | LW 200kHz |
| 16ch | MW 1200kHz | MW 1197kHz | LW 350kHz |



LCD PCB

Fig. 5-6

### LW

**2 LW LOW RANGE SENSITIVITY**
1. 160kHz, 68dBμ
2. 160kHz
3. TUNER OUT. T3
4. Within 10% distortion factor.

**3 LW HIGH RANGE SENSITIVITY**
1. 300kHz, 68dBμ
2. 300kHz
3. TUNER OUT. VC2
4. Within 10% distortion factor.
   * For best result, repest steps 2 and 3, two or three times.

**1 LW TUNING VOLTAGE**
1. No signal input
2. 350kHz
3. Connect the DC Voltmeter between TP1L and GND. T5
4. 7.5 ± 0.1V

NOTES:
1. Set the SSG to 30%, 1kHz of each.
2. Confirm that the sensitivity margin between Low and High Range sensitivities is within 6dBμ, otherwise readjust Low and High Range sensitivity.

### MW

**4 AM IF**
1. 999 (1000) kHz, 74dBμ
2. 999 (1000) kHz
3. TUNER OUT. T1
4. Maximum output
   * Less than 2.5% distortion factor.

**2 MW LOW RANGE SENSITIVITY**
1. 603 (600) kHz, 60dBμ
2. 603 (600) kHz
3. TUNER OUT. T2
4. Within 10% distortion factor.

**3 MW HIGH RANGE SENSITIVITY**
1. 1404 (1400) kHz, 60dBμ
2. 1404 (1400) kHz
3. TUNER OUT. VC1
4. Within 10% distortion factor.
   * For best result, repeat steps 2 and 3, two or three times.

**1 MW TUNING VOLTAGE**
1. No signal input
2. 1404 (1400) kHz
3. Connect the DC Voltmeter between TP1 and gnd. T4
4. 6.7 ± 0.1V

NOTES:
1. Set the S.S.G. to 30% 1kHz of each.
2. Confirm that the sensitivity margin between Low and High Range sensitivities is within 6dBμ, otherwise readjust Low and High Range sensitivity.
3. ( kHz) in result & Remarks indicates the test frequencies is AM 10kHz STEP area.

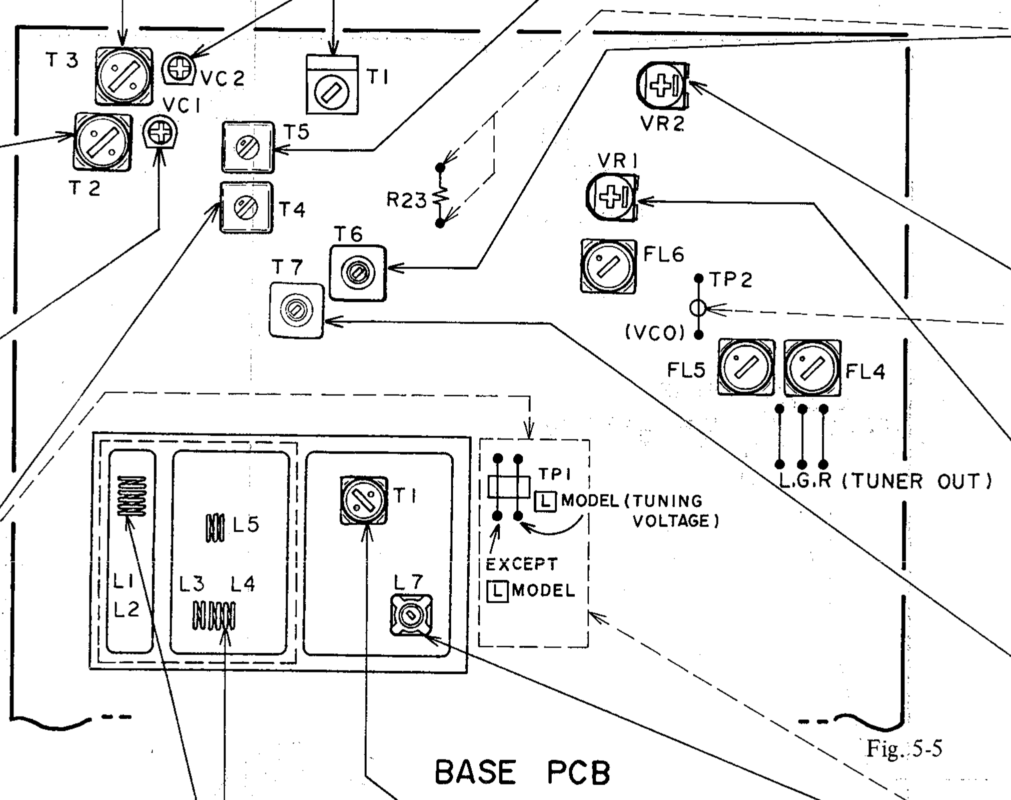


Fig. 5-5

### FM

**4 FM CENTER VOLTAGE**
1. No signal input
2. Tunes only noise without interference from Broadcasting.
3. Connect the DC Voltmeter between both end of R23, T6
4. 0V

**6 MPX FREE RUNNING FREQUENCY**
1.
2.
3. Connect a Frequency counter to TP2 and GND, VR2.
3. 38kHz ± 200Hz

**7 STEREO SEPARATION**
1. 98MHz (Stereo) L ch (R ch) 60dBμ
2. 98MHz
3. TUNER OUT. VR1
4. Minimum output of R ch (L ch)

**2 FM LOW RANGE SENSITIVITY**
1. 90MHz (Mono), 8dBμ, 12dBμ V
2. 90MHz (Mono
3. TUNER OUT. L2, L4
4.
   * See Note 4.
   * Within 3% distortion factor.

**8 DISTORTION (STEREO)**
1. 98MHz (Stereo), 60dBμ
2. 98MHz
3. TUNER OUT. T1
4. Less than 0.8% (Both channel)
   * See Note 2.

**3 FM HIGH RANGE SENSITIVITY**
1. 108MHz (Mono), 8dBμ, 12dBμ V
2. 108MHz (Mono)
3. TUNER OUT. L2, L4
4.
   * See Note 4.
   * Within 3% distortion factor.

* For best result, repeat steps 2 and 3 two or three times.

**1 FM TUNING VOLTAGE**
1. No signal input
2. 87.8MHz
3. Connect the DC Voltmeter between TP1 and GND. L7
4. 3.5 ± 0.1V

**5 DISTORTION FACTOR (MONO)**
1. 98.0MHz (Mono), 60dBμ
2. 98.0MHz
3. TUNER OUT. T7
4. Less than 0.3%

* For best result, repeat steps 4 and 5, two or three times.

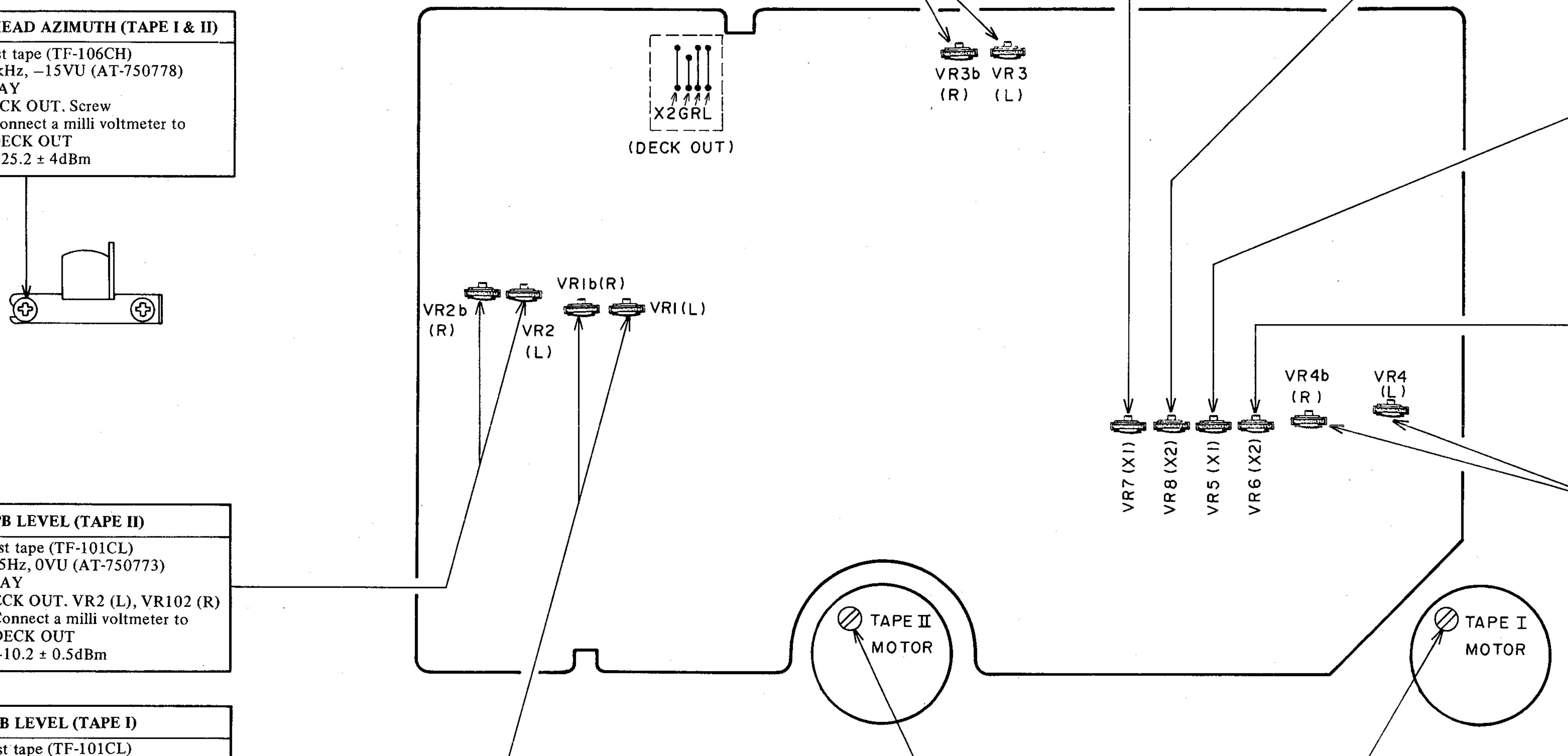
NOTES:
1. Set the SSG to 75kHz deviation, 1kHz for C, A, U, S modes, 40kHz deviation, 1kHz for B, E, V models.
2. Readjust step 2 to step 5, in case T1 is turned more than a quarter turn obtaining the proper distortion (STEREO).
3. Confirm that the sensitivity margin between Low and High Range sensitivities is within 3dB, otherwise readjust low and High Range sensitivity.
4. In step 2, 3 normally confirmation only, except waved coil by mistake.
5. 0dBμ = 1μV.

## 5-4. DECK ADJUSTMENT

| Step | Adjustment Item |
|---|---|
| | 1. Test Tape, Input signal<br>2. Mode<br>3. Test point & Adjustment point<br>4. Result & Remarks |

Adjustment Part →

Test Point - - →



**9 REC LEVEL**
1. Normal blank tape, 315Hz, –8.5dBm CD INPUT
2. REC & PLAY
3. LINE OUT. VR3 (L), VR3b (R)
4. • Connect a milli voltmeter to DECK OUT
   • –10.2 ± 0.5dBm

AC-M512/L, AC-A510/L

**4 TAPE SPEED (TAPE II)**
1. Test tape (TF-110CT) 3,150Hz, 0VU (AT-751263)
2. Normal speed PLAY
3. • DECK OUT. VR7
   • 3,150 ± 5Hz

**2 TAPE SPEED X2 (TAPE II)**
1. Test tape (TF-110CT) 3,150Hz, 0VU (AT-751263)
2. Double speed PLAY
3. DECK OUT. VR8
4. • Connect DECK OUT X2 to GND
   • 6,300 ± 5Hz

**3 TAPE SPEED (TAPE I)**
1. Test tape (TF-110CT) 3,150Hz, 0VU (AT-751263)
2. Normal speed PLAY
3. DECK OUT. VR5
4. 3,170 ± 5Hz

**1 TAPE SPEED X2 (TAPE I)**
1. Test tape (TF-110CT) 3,150Hz, 0VU (AT-751263)
2. Double speed PLAY
3. DECK OUT. VR6
4. • Connect DECK OUT X2 to GND
   • 6,310 ± 5Hz

**5 HEAD AZIMUTH (TAPE I & II)**
1. Test tape (TF-106CH) 10kHz, –15VU (AT-750778)
2. PLAY
3. DECK OUT. Screw
4. • Connect a milli voltmeter to DECK OUT
   • –25.2 ± 4dBm

**7 PB LEVEL (TAPE II)**
1. Test tape (TF-101CL) 315Hz, 0VU (AT-750773)
2. PLAY
3. DECK OUT. VR2 (L), VR102 (R)
4. • Connect a milli voltmeter to DECK OUT
   • –10.2 ± 0.5dBm

**6 PB LEVEL (TAPE I)**
1. Test tape (TF-101CL) 315Hz, 0VU (AT-750773)
2. PLAY
3. DECK OUT. VR1 (L), VR101 (R)
4. • Connect a milli voltmeter to DECK OUT
   • –10.2 ± 0.5dBm

**8 REC BIAS**
1. Normal blank tape, 1kHz & 10kHz, –28.5dBm CD INPUT
2. REC & PLAY
3. DECK OUT. VR4 (L), VR4b (R)
4. • Connect a milli voltmeter to DECK OUT
   • Level difference between 1kHz & 10kHz is within ± 0.5 dBm.

**NOTES:**
- * All adjustments are without Dolby.
- * Use the following cassette measuring tapes:
  NORMAL TAPE: Maxell UDI C-60
  $CrO_2$ TAPE: TDK SA C-60
  METAL TAPE: TDK MA C-60
- * Beat cancel SW is Normal Position during adjustment.

**2 TAPE SPEED (TAPE II)**
1. Test tape (TF-110CT) 3,150Hz, 0VU (AT-751263)
2. PLAY
3. LINE OUT, MOTOR VR
4. • Connect a frequency counter to LINE OUT
   • 3,150 ± 5Hz

**1 TAPE SPEED (TAPE I)**
1. Test tape (TF-110CT) 3,150Hz, 0VU (AT-751263)
2. PLAY
3. LINE OUT, MOTOR VR
4. • Connect a frequency counter to LINE OUT
   • 3,170 ± 5Hz

AC-M312/L ONLY

# VI.PARTS LIST

## ATTENTION

1. When placing an order for parts, be sure to list Part No., Model No. and the description of each part. Otherwise, the non-delivery of the part or the delivery of a wrong part may result.
2. Please make sure that Part No. is correct when ordering.
   If not, a part different from the one you ordered may be delivered.
3. Since the parts shown in Parts List of Preliminary Service Manual may have been the subject of changes, please use this Parts List for all future reference.

## HOW TO USE THIS PARTS LIST

1. This Parts List lists those parts which are considered necessary for repairs. Other common parts, such as resistors and capacitors, are listed in the "Common List for Service Parts" from which these parts should be selected and stocked.
2. The Recommended Spare Parts List shows those parts in the Parts List which are considered particularly important for service.
3. Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
4. How to read the Parts List.

a) Mechanism Block

### 2. HEAD BASE BLOCK

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 2-1x | BH-T2023A320A | HEAD BASE BLOCK |
| 2-2 | HP-H2206A010A | HEAD R/P PR4-8FU C |
| 2-3 | ZS-477876 | PAN20×03STL CMT |
| 2-4 | ZS-536488 | BID20×08STL CMT |
| 2-5 | ZG-402895 | SP CS ANGLE ADJUST |

SP (Service Parts) Classification

A small "x" indicates that this part is not shown in the Photo or Illustration.

This number corresponds with the individual parts index number in that figure.

This number corresponds with the Figure Number.

b) PC Board

### 6. MAIN PC BOARD

| REF. NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 6-IC1 | EI-324536 | IC HD14049BP |
| 6-IC2 | EI-336801 | IC MB8841-564M |
| 6-C1A | EC-338399 | C MMY V 223M 250AC [U,E,B,S] |
| 6-C1B | EC-350949 | C MMY V 223M 250DC [J] |
| 6-C1C | EC-338397 | C MMY V 223M 125AC [C,A] |
| 6-X1 | EI-318384 | OSC X'TAL NC-18C |

Symbols for primary destination

[A]: AAL(U.S.A.)
[S]: SAA(Australia)
[B]: BEAB(England)
[U]: U/T(Universal Area)
[C]: CSA(Canada)
[V]: VDE(W. Germany)
[E]: CEE(Europe)
[Y]: Custom Version
[J]: JPN(Japan)

SP (Service Parts) Classification

These reference symbols correspond with component symbols in the Schematic Diagrams.

The available PC Board Blocks are listed separately.

5. When Part No. is known, Parts Index at end of Parts List can be used to locate where that part is shown in Parts List by its Reference No. listed at right of Part No.

## WARNING

⚠ (*) INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS.

## AVERTISSEMENT

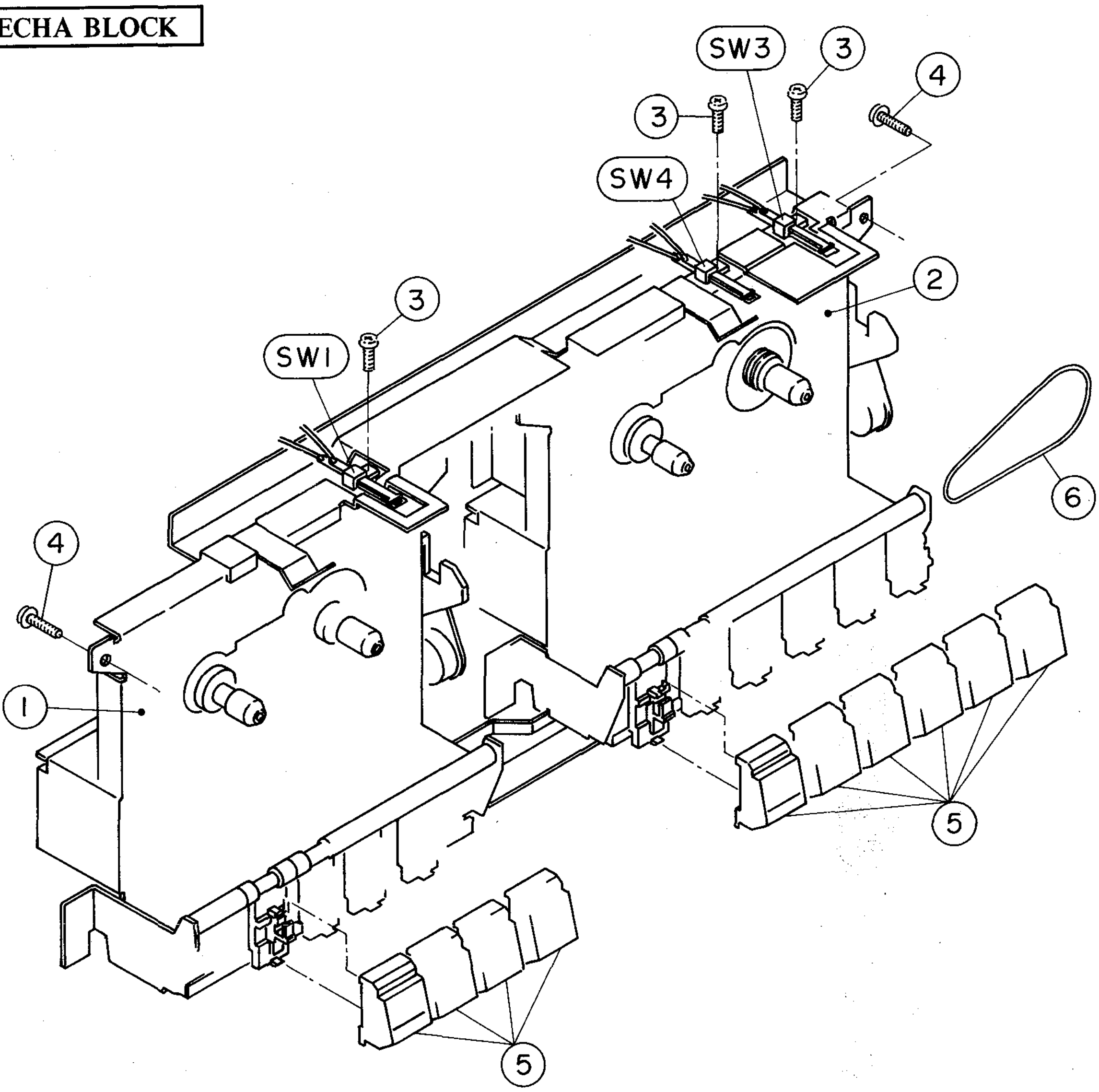
⚠ (*) IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÉCES RECOMMANDEES PAR LÉ FABRICANT.

# MODEL AC-M312/L, AC-M512/L

## 1. RECOMMENDED SPARE PARTS

| Ref. No. | Part No. | Description |
|---|---|---|
| 1 | AX-500546 | REMOCON *C1017 WIRELESS-B (TW) |
| 2 | BB-500469 | MECHA AKI-050FMB BLK (TW) |
| 3 | BB-500470 | MECHA AKI-051FMB BLK (TW) |
| 4 | BB-500471 | MECHA AKI-052FMB BLK (TW) |
| 5 | BB-500472 | MECHA AKI-053FMB BLK (TW) |
| 6 | BF-720036 | FLYWHEEL ASSY |
| 7 | BM-720050 | MOTOR AC-M312 |
| 8 | BM-720046 | MOTOR AC-M512 |
| 9 | BR-720032 | SUPPLY REEL TABLE BLK AC-M312 |
| 10 | BR-720034 | TAKE-UP REEL TABLE BLK AC-M312 |
| 11 | *BT-500434 | TRANS POWER C1016-U |
| 12 | *BT-500435 | TRANS POWER C1016-C |
| 13 | *BT-500436 | TRANS POWER C1016-E,V |
| 14 | *BT-500437 | TRANS POWER C1016-B,S |
| 15 | *BT-500830 | TRANS POW C1016-Y7 (TW) |
| 16 | *BT-500438 | TRANS POWER C1017-U |
| 17 | *BT-500439 | TRANS POWER C1017-C |
| 18 | *BT-500440 | TRANS POWER C1017-E,V |
| 19 | *BT-500831 | TRANS POW C1017-Y7 |
| 20 | BZ-720035 | CLUTCH ASSY BLK AC-M312 |
| 21 | BZ-720037 | PINCH ROLLER ARM ASSY |
| 22 | ED-355426 | D LED PR-5705S-B7 RED |
| 23 | ED-373169 | D LED SLP-336C-20 GREEN |
| 24 | ED-365107 | D LED SLP-384C-50 GREEN |
| 25 | ED-360409 | D PHOTO PN323B |
| 26 | *ED-348200 | D SILICON DBA20C-K15 200/2.0A |
| 27 | *ED-200213 | D SILICON DBA40C-K15 200/2.6A |
| 28 | *ED-350748 | D SILICON DBA60C-K15 200/1.0A |
| 29 | *ED-357754 | D SILICON DS135D 200/1.0A |
| 30 | ED-301911 | D SILICON H DS448 |
| 31 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 32 | ED-349448 | D VARACTOR 1SV147 |
| 33 | ED-349460-A | D VARACTOR SVC321SPA ABCD DBL |
| 34 | ED-337267 | D ZENER H HZ4 A1 |
| 35 | ED-319167 | D ZENER H HZ6 C3 |
| 36 | ED-321180 | D ZENER H HZ9 B2 |
| 37 | ED-346538 | D ZENER H HZ9L A2 |
| 38 | ED-346551 | D ZENER H HZ11L B3 |
| 39 | ED-367552 | D ZENER H HZS15J B1 F05 |
| 40 | EE-F0131E010A | TW PC FRONT END BLK FE31(U)<br>[EXCEPT V] |
| 41 | EE-F0141E010B | TW PC FRONT END BLK FE41(V)<br>[V] |
| 42 | *EF-306950 | FUSE TSC A 250V 2.00A<br>[U,Y7] |
| 43 | *EF-306952 | FUSE TSC A 250V 4.00A<br>[U,Y7] |
| 44 | *EF-308847 | FUSE TSC 125V 1.60A<br>[C] |
| 45 | *EF-323080 | FUSE TSC 125V 3.15A<br>[C] |
| 46 | *EF-306957 | FUSE TSC 125V 4.00A<br>[C] |
| 47 | *EF-346115 | FUSE TSC 125V 6.30A<br>[C] |
| 48 | *EF-602550 | FUSE SEMKO T 250V 1.25A<br>[E,V,S] |
| 49 | *EF-691007 | FUSE SEMKO T 250V 3.15A<br>[E,V,S] |
| 50 | *EF-690996 | FUSE SEMKO T 250V 4.00A<br>[E,V,S] |
| 51 | *EF-359007 | FUSE BET T 250V 1.25A<br>[B] |
| 52 | *EF-359225 | FUSE BET T 250V 3.15A<br>[B] |
| 53 | *EF-359086 | FUSE BET T 250V 4.00A<br>[B] |
| 54 | EH-344434 | FILTER CE BFU450C4N 0.450MHZ |
| 55 | EH-355568 | FILTER CE SFE10.7MS2G-A |
| 56 | EH-338338 | FILTER CE SFE10.7MS3GK-A |
| 57 | EH-336776 | FILTER DB D07003K 100KHZ |
| 58 | EH-360924 | FILTER LC BP BPMB6A |
| 59 | EH-501321 | FILTER LC LP L351Y015(FB-7DG) |
| 60 | EH-501323 | FILTER LC LP L351Y016(FB-7DG) |
| 61 | EI-369608 | IC BA3416BL |
| 62 | EI-373214 | IC HA12086 |
| 63 | EI-373215 | IC HD74LS145P |
| 64 | EI-361624 | IC LA1265 |
| 65 | EI-359053 | IC LA3600 |
| 66 | EI-345551 | IC LB1403 |
| 67 | EI-351569 | IC LC4001B |
| 68 | EI-366767 | IC LM6416E-1976 |
| 69 | EI-346071 | IC M5218L-21 |
| 70 | EI-349719 | IC M5218P |
| 71 | EI-344764 | IC M5218P-21 |
| 72 | *EI-366695 | IC STK4172II |
| 73 | EI-359683 | IC TA7343AP |
| 74 | EI-304657 | IC TC4011BP |
| 75 | EI-332259 | IC TC4052BP |
| 76 | EI-363289 | IC TC9172 |
| 77 | EI-351966 | IC TC9176P |
| 78 | EI-363290 | IC TC9302AF-011-BS |
| 79 | EI-367271 | IC UPC1490HA |
| 80 | EI-337017 | OSC CE CSB800A 0.800000MHZ |
| 81 | EI-344422 | OSC X'TAL HC-18/U 7.200MHZ |
| 82 | EJ-359031 | TERMINAL LEVER YKD31-0215 P 2P |
| 83 | EJ-373203 | TERMINAL LEVER SQ2743#10 |
| 84 | EM-361644 | IND LCD 9419P |
| 85 | *ER-200926 | R FUSE H S10 ERD2FC 1/4W 27R0G |
| 86 | *ER-319455 | R FUSE H S10 ERD2FC 1/4W 10R0G |
| 87 | ES-720041 | SW LEAF LSA-1119F |
| 88 | ES-717768 | SW LEAF LSA-1119R-1 |
| 89 | ES-366789 | SW LEAF LSA-1132EAU |
| 90 | ES-364176 | SW PUSH SPPH11 2-02-02N |
| 91 | *ES-349070 | SW SELECTOR YKS11-0002 02-4<br>[U] |
| 92 | ES-363292 | SW SLIDE 00120156 01-2 |
| 93 | ES-501047 | SW SLIDE J-S5029#01 02-02N |
| 94 | ES-349474 | SW TACT SKHHAM004A |
| 95 | ET-363953 | TR DTA114TS |
| 96 | ET-360399 | TR DTC114TS |
| 97 | ET-336869 | TR 2SC2999 C,D |
| 98 | ET-349449 | TR FET 2SK161 O,Y |
| 99 | ET-337759 | TR FET 2SK246 GR |
| 100 | ET-353899 | TR 2SA1317 S,T,U |
| 101 | ET-355626 | TR 2SA992 E,F |
| 102 | *ET-366365 | TR 2SB1185 E,F |
| 103 | *ET-373210 | TR 2SB1187 E,F |
| 104 | ET-347143 | TR 2SC1845 E,F |
| 105 | ET-308977 | TR 2SC2274K F F05 |
| 106 | ET-338410 | TR 2SC2878 A,B |
| 107 | ET-360067 | TR 2SC3330 T,U F05 |
| 108 | ET-360137 | TR 2SC3330 U,V F05 |
| 109 | ET-351872 | TR 2SC3383 R,S |
| 110 | ET-350795 | TR 2SC3399 F05 |
| 111 | ET-349592 | TR 2SC3400 F05 |
| 112 | ET-349366 | TR 2SC3402 F05 |
| 113 | ET-328265 | TR 2SC930 F |
| 114 | ET-338324 | TR 2SD1012-V H F05 |
| 115 | ET-310148 | TR 2SD612K E,F |
| 116 | EV-366674 | VR SPL 6THROW V JK252-5G(6) |
| 117 | EV-366676 | VR ROTARY VB161GPH25F 3B 104 |
| 118 | EV-366768 | VR ROTARY V12L5GS256F3B100KX2 |
| 119 | EZ-366626 | BATTERY LITHIUM BR2032-1VC |
| 120 | HP-720048 | HEAD R/P |
| 121 | HP-720051 | HEAD R/P |
| 122 | MB-500390 | BELT (TW) |
| 123 | MB-720039 | BELT AUTO |
| 124 | MB-720038 | BELT DRIVE |
| 125 | MB-720042 | BELT DRIVE |
| 126 | MB-720040 | BELT FR |
| 127 | MC-500465 | COUNTER T3SG100-130B1-789 (TW) |

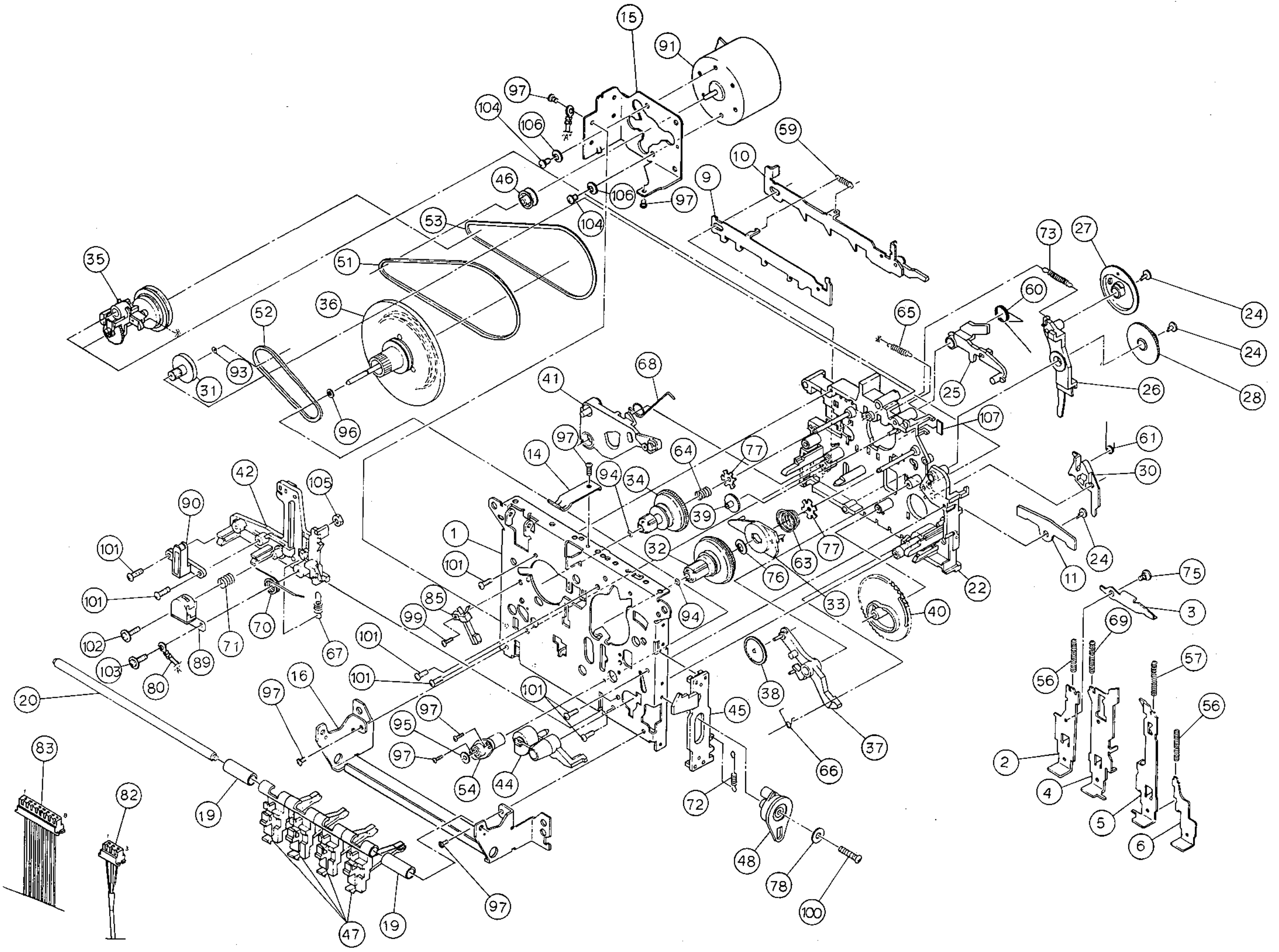
## MECHA BLOCK



## 2. MECHA BLOCK

| Ref. No. | Part No. | Description |
|---|---|---|
| 2-1A | BB-500470 | MECHA AKI-051FMB BLK (TW)<br>[AC-M312] |
| 2-1B | BB-500472 | MECHA AKI-053FMB BLK (TW)<br>[AC-M512] |
| 2-2A | BB-500469 | MECHA AKI-050FMB BLK (TW)<br>[AC-M312] |
| 2-2B | BB-500471 | MECHA AKI-052FMB BLK (TW)<br>[AC-M512] |
| 2-SW1 | ES-366789 | SW LEAF LSA-1132EAU<br>[TAPE 1 70U] |
| 2-SW3 | ES-366789 | SW LEAF LSA-1132EAU<br>[TAPE 2 70U] |
| 2-SW4 | ES-366789 | SW LEAF LSA-1132EAU<br>[TAPE 2 METAL] |
| 2-3 | ZS-201275 | ST PAN26X06STL CMT<br>[LEAF SW FIX] |
| 2-4 | ZS-323993 | PT BR30X10STL CMT<br>[MECHA BLOCK FIX] |
| 2-5-B | SK-500406B | KNOB OPERATION (B) (TW)<br>[BLACK] |
| 2-5-W | SK-500406D | KNOB OPERATION(W) (TW)<br>[WHITE] |
| 2-6 | MB-500390 | BELT (TW)<br>[COUNTER BELT] |

## TAPE I MECHA BLOCK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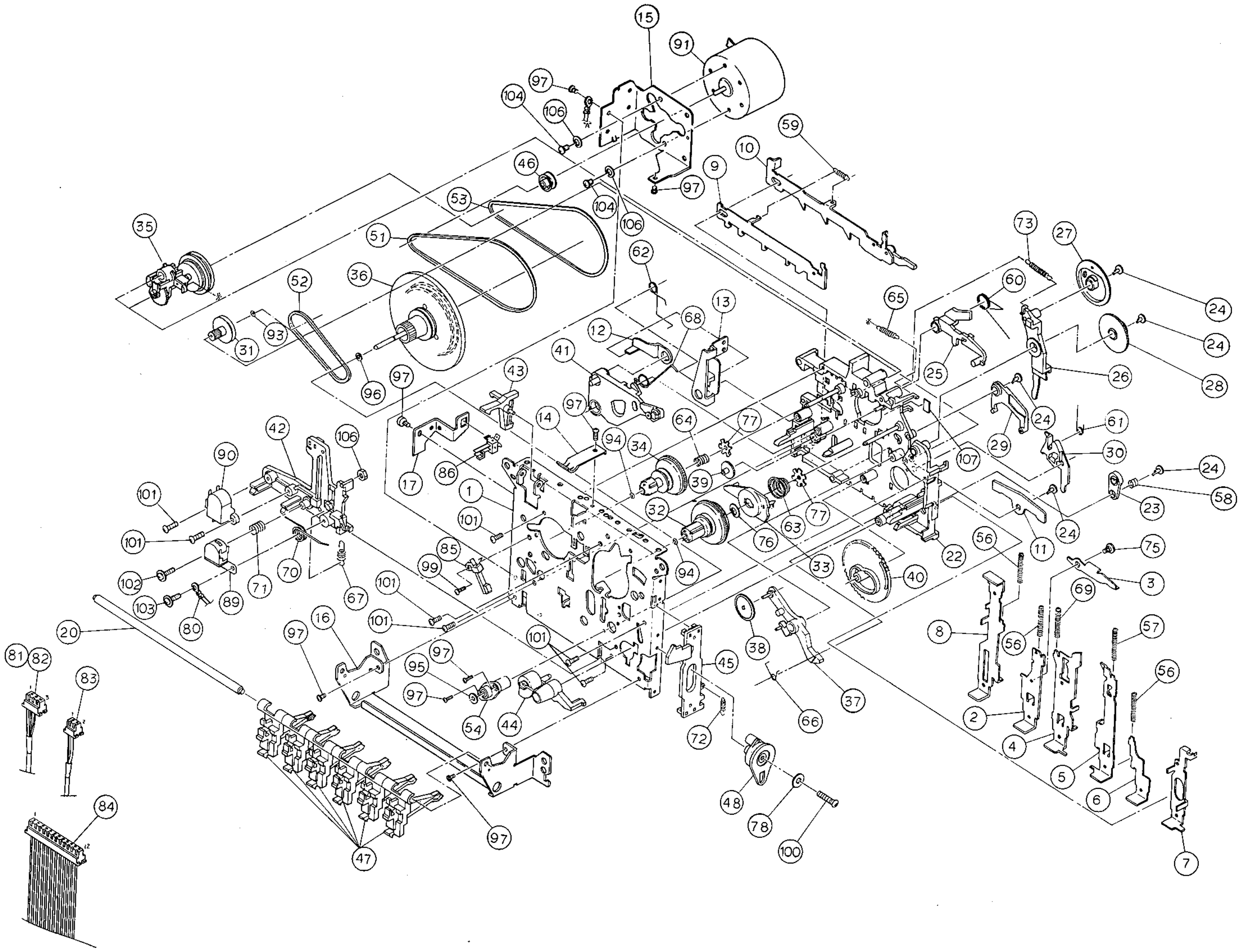
## 3. TAPE I MECHA BLOCK

| Ref. No. | Part No. | Description |
|---|---|---|
| 3-32 | BR-720034 | TAKE-UP REEL TABLE BLK AC-M312 |
| 3-34 | BR-720032 | SUPPLY REEL TABLE BLK AC-M312 |
| 3-35 | BZ-720035 | CLUTCH ASSY BLK AC-M312 |
| 3-36 | BF-720036 | FLYWHEEL ASSY |
| 3-44 | BZ-720037 | PINCH ROLLER ARM ASSY |
| 3-51A | MB-720038 | BELT DRIVE<br>[AC-M312] |
| 3-51B | MB-720042 | BELT DRIVE<br>[AC-M512] |
| 3-52 | MB-720039 | BELT AUTO |
| 3-53 | MB-720040 | BELT FR |
| 3-85 | ES-720041 | SW LEAF LSA-1119F<br>[SW2 MUTE] |
| 3-89 | HP-720051 | HEAD R/P<br>[H901] |
| 3-91A | BM-720050 | MOTOR AC-M312<br>[AC-M312] |
| 3-91B | BM-720046 | MOTOR AC-M512<br>[AC-M512] |

## TAPE II MECHA BLOCK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## 4. TAPE II MECHA BLOCK

| Ref. No. | Part No. | Description |
|---|---|---|
| 4-32 | BR-720034 | TAKE-UP REEL TABLE BLK AC-M312 |
| 4-34 | BR-720032 | SUPPLY REEL TABLE BLK AC-M312 |
| 4-35 | BZ-720035 | CLUTCH ASSY BLK AC-M312 |
| 4-36 | BF-720036 | FLYWHEEL ASSY |
| 4-44 | BZ-720037 | PINCH ROLLER ARM ASSY |
| 4-51A | MB-720038 | BELT DRIVE<br>[AC-M312] |
| 4-51B | MB-720042 | BELT DRIVE<br>[AC-M512] |
| 4-52 | MB-720039 | BELT AUTO |
| 4-53 | MB-720040 | BELT FR |
| 4-85 | ES-720041 | SW LEAF LSA-1119F<br>[SW5 MUTE] |
| 4-86 | ES-717768 | SW LEAF LSA-1119R-1<br>[SW6 REC] |
| 4-89 | HP-720048 | HEAD R/P<br>[H902] |
| 4-90 | HE-720049 | HEAD E<br>[H903] |
| 4-91A | BM-720050 | MOTOR AC-M312<br>[AC-M312] |
| 4-91B | BM-720046 | MOTOR AC-M512<br>[AC-M512] |

## 5. P.C BOARD BLOCK

| Ref. No. | Part No. | Description |
|---|---|---|
| 5-1A | BA-C1016A070A | TW PC BASE(312)BLK AC-M312(U) [U,Y7] |
| 5-1B | BA-C1016A070B | TW PC BASE(312)BLK AC-M312(C) [C] |
| 5-1C | BA-C1016A070C | TW PC BASE(312)BLK AC-M312(E) [E] |
| 5-1D | BA-C1016A070D | TW PC BASE(312)BLK AC-M312(V) [V] |
| 5-1E | BA-C1016A070E | TW PC BASE(312)BLK AC-M312(S) [S] |
| 5-1F | BA-C1016A070F | TW PC BASE(312)BLK AC-M312L [E,B] |
| 5-1G | BA-C1017A070A | TW PC BASE(512)BLK AC-M512(U) [U,Y7] |
| 5-1H | BA-C1017A070B | TW PC BASE(512)BLK AC-M512(C) [C] |
| 5-1J | BA-C1017A070C | TW PC BASE(512)BLK AC-M512(E) [E] |
| 5-1K | BA-C1017A070D | TW PC BASE(512)BLK AC-M512(V) [V] |
| 5-1L | BA-C1017A070E | TW PC BASE(512)BLK AC-M512(S) [S] |
| 5-1M | BA-C1017A070F | TW PC BASE(512)BLK AC-M512L [E,B] |
| 5-2A | EE-F0131E010A | TW PC FRONT END BLK FE31(U) [U,Y7,C,E,B,S] |
| 5-2B | EE-F0141E010B | TW PC FRONT END BLK FE41(V) [V] |
| 5-3A | BA-C1016A030A | TW PC#DECK(312) BLK AC-M312(U) [U] |
| 5-3B | BA-C1016A030B | TW PC#DECK(312) BLK AC-M312(C) [C] |
| 5-3C | BA-C1016A030C | TW PC#DECK(312) BLK AC-M312(E) [E,S] |
| 5-3D | BA-C1016A030D | TW PC#DECK(312) BLK AC-M312(V) [V] |
| 5-3E | BA-C1016A030E | TW PC#DECK(312) BLK AC-M312L [E,B] |
| 5-3F | BA-C1017A030A | TW PC#DECK(512) BLK AC-M512(U) [U,Y7] |
| 5-3G | BA-C1017A030B | TW PC# DECK(512)BLK AC-M512(C) [C] |
| 5-3H | BA-C1017A030C | TW PC#DECK(512)BLK AC-M512(E) [E,S] |
| 5-3J | BA-C1017A030D | TW PC#DECK(512)BLK AC-M512(V) [V] |
| 5-3K | BA-C1017A030E | TW PC#DECK(512)BLK AC-M512L [E,B] |
| 5-4A | BA-C1016A020A | TW PC#MAIN(312)BLK AC-M312(U) [U,Y7] |
| 5-4B | BA-C1016A020B | TW PC#MAIN(312)BLK AC-M312(C) [C] |
| 5-4C | BA-C1016A020C | TW PC#MAIN(312)BLK AC-M312(E) [E,B,S] |
| 5-4D | BA-C1016A020D | TW PC#MAIN(312)BLK AC-M312(V) [V] |
| 5-4E | BA-C1017A020A | TW PC#MAIN(512)BLK AC-M512(U) [U,Y7] |
| 5-4F | BA-C1017A020B | TW PC#MAIN(512)BLK AC-M512(C) [C] |
| 5-4G | BA-C1017A020C | TW PC#MAIN(512)BLK AC-M512(E) [E,B,S] |
| 5-4H | BA-C1017A020D | TW PC#MAIN(512)BLK AC-M512(V) [V] |
| 5-5A | BA-C1016A040A | TW PC# CONTROL(A)BLK AC-M312 |
| 5-5B | BA-C1016A040B | TW PC# CONTROL(A)BLK AC-M512 |

PC (#) DECK BLK CONSISTS OF FOLLOWING P.C BOARD.

- DECK P.C BOARD
- DOLBY SW P.C BOARD
- BEAT SW P.C BOARD
- LCD P.C BOARD

PC (#) MAIN BLK CONSISTS OF FOLLOWING P.C BOARD.

- MAIN P.C BOARD
- DOLBY SW P.C BOARD
- POWER SW P.C BOARD
- HEADPHONE P.C BOARD
- ENCODER VOLUME P.C BOARD

PC (#) CONTROL BLK CONSISTS OF FOLLOWING P.C BOARD.

- CONTROL P.C BOARD
- DETECTOR P.C BOARD

## 6. BASE P.C BOARD

| Ref. No. | Part No. | Description |
|---|---|---|
| 6-D1 | ED-349460-A | D VARACTOR SVC321SPA ABCD DBL |
| 6-D2 | ED-349460-A | D VARACTOR SVC321SPA ABCD DBL |
| 6-D3 | ED-344280 | D SILICON H GMA-01-FY2 F05 [L ONLY] |
| 6-D4 | ED-344280 | D SILICON H GMA-01-FY2 F05 [L ONLY] |
| 6-D5 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 6-D6 | ED-344280 | D SILICON H GMA-01-FY2 F05 [L ONLY] |
| 6-D7 | ED-344280 | D SILICON H GMA-01-FY2 F05 [L ONLY] |
| 6-D8 | ED-321180 | D ZENER H HZ9 B2 |
| 6-D9 | ED-344280 | D SILICON H GMA-01-FY2 F05 [U,Y7] |
| 6-D10 | ED-301911 | D SILICON H DS448 |
| 6-D11 | ED-319167 | D ZENER H HZ6 C3 |
| 6-D101 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 6-D102 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 6-D103 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 6-D104 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 6-D105 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 6-D106 | ED-346538 | D ZENER H HZ9L A2 |
| 6-D107 | ED-346538 | D ZENER H HZ9L A2 |
| 6-D201 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 6-FL1 | EH-355568 | FILTER CE SFE10.7MS2G-A [U,Y7,C,E,B,S] |
| 6-FL1A | EH-338338 | FILTER CE SFE10.7MS3GK-A [V] |
| 6-FL2 | EH-355568 | FILTER CE SFE10.7MS2G-A |
| 6-FL3 | EH-344434 | FILTER CE BFU450C4N 0.450MHZ |
| 6-FL4 | EH-501321 | FILTER LC LP L351Y015(FB-7DG) |
| 6-FL5 | EH-501321 | FILTER LC LP L351Y015(FB-7DG) |
| 6-FL6 | EH-501323 | FILTER LC LP L351Y016(FB-7DG) [V] |
| 6-FL7 | EH-360924 | FILTER LC BP BPMB6A [V] |
| 6-IC1 | EI-361624 | IC LA1265 |
| 6-IC2 | EI-359683 | IC TA7343AP |
| 6-IC3 | EI-363289 | IC TC9172 |
| 6-IC101 | EI-344764 | IC M5218P-21 |
| 6-IC102 | EI-332259 | IC TC4052BP |
| 6-IC103 | EI-349719 | IC M5218P |
| 6-IC201 | EI-351966 | IC TC9176P |
| 6-IC202 | EI-349719 | IC M5218P |
| 6-IC301 | EI-332259 | IC TC4052BP |
| 6-J101 | EJ-501350 | PIN J PCB-204S P 4P [CD/PHONO IN] |
| 6-J102 | EJ-337424 | PIN J AJC-034-ABB P 2P [LINE OUT] |
| 6-J103 | EJ-373207 | SOCKET INLET HEC0470-01-250 [POWER SUPPLY] |
| 6-L101 | EO-325760 | COIL FIX 1 LAL04 330K [V] |
| 6-R13 | ER-324184 | R CB H S10 FS RDS 1/4W 121J |

| Ref. No. | Part No. | Description |
|---|---|---|
| 6-R23 | ER-333406 | R CB H S10 FS RDS 1/4W 363J |
| 6-R35 | ER-367512 | R CB H S12 FS RDS 1/2W 121J |
| 6-R57 | ER-306805 | R CB H S15 FS RDS 1/2W 101J |
| 6-R83 | ER-321192 | R OMF H S20 FS 2W 101J |
| 6-SW1 | ES-363292 | SW SLIDE 00120156 01-2<br>[AM STEPE U,Y7] |
| 6-TM1 | EJ-359031 | TERMINAL LEVER YKD31-0215 P 2P<br>[ANTENNA] |
| 6-TR1 | ET-338410 | TR 2SC2878 A,B<br>[L ONLY] |
| 6-TR2 | ET-349449 | TR FET 2SK161 O,Y<br>[L ONLY] |
| 6-TR4 | ET-328265 | TR 2SC930 F |
| 6-TR5 | ET-360137 | TR 2SC3330 U,V F05 |
| 6-TR6 | ET-351872 | TR 2SC3383 R,S |
| 6-TR7 | ET-360137 | TR 2SC3330 U,V F05 |
| 6-TR8 | ET-351872 | TR 2SC3383 R,S |
| 6-TR9 | ET-353899 | TR 2SA1317 S,T,U |
| 6-TR10 | ET-353899 | TR 2SA1317 S,T,U |
| 6-TR11 | ET-360137 | TR 2SC3330 U,V F05<br>[L ONLY] |
| 6-TR12 | ET-360137 | TR 2SC3330 U,V F05<br>[L ONLY] |
| 6-TR13 | ET-360137 | TR 2SC3330 U,V F05 |
| 6-TR14 | ET-360137 | TR 2SC3330 U,V F05 |
| 6-TR15 | ET-360137 | TR 2SC3330 U,V F05 |
| 6-TR16 | ET-337759 | TR FET 2SK246 GR |
| 6-TR17 | ET-351872 | TR 2SC3383 R,S |
| 6-TR18 | ET-360137 | TR 2SC3330 U,V F05 |
| 6-TR101 | ET-350795 | TR 2SC3399 F05 |
| 6-TR102 | ET-350795 | TR 2SC3399 F05 |
| 6-TR103 | ET-350795 | TR 2SC3399 F05 |
| 6-TR104 | ET-353899 | TR 2SA1317 S,T,U |
| 6-TR105 | ET-353899 | TR 2SA1317 S,T,U |
| 6-TR106 | *ET-360067 | TR 2SC3330 T,U F05 |
| 6-TR107 | *ET-353899 | TR 2SA1317 S,T,U |
| 6-T1 | EO-356732 | COIL IFT BCFLZ-450A |
| 6-T2 | EO-501338 | COIL VARI 2 Y36(CSM-10C) |
| 6-T3 | EO-501339 | COIL VARI 2 Y037(SM-10C)<br>[L ONLY] |
| 6-T4 | EO-363279 | COIL OSC 2 A7NRS-9857X 150.0UH |
| 6-T5 | EO-352089 | COIL OSC 2 7BRS-9098X 580.0UH<br>[L ONLY] |
| 6-T6 | EO-373196 | COIL DET 2 195AEA-1133FGL |
| 6-T7 | EO-373197 | COIL DET 2 YTKAEAS-35879X |
| 6-VC1 | EC-363329 | C S-FIX H CTC-64-010 2.5-10 |
| 6-VC1A | EC-363331 | C S-FIX H CTC-6U-030 5.5-30<br>[L ONLY] |
| 6-VC2 | EC-363331 | C S-FIX H CTC-6U-030 5.5-30<br>[L ONLY] |
| 6-VR1 | EV-367499 | R S-FIX H V6EKPV(1S) 3P 472 |
| 6-VR2 | EV-367499 | R S-FIX H V6EKPV(1S) 3P 472 |

## 7. FRONT END P.C BOARD

| Ref. No. | Part No. | Description |
|---|---|---|
| 7-D1 | ED-349448 | D VARACTOR 1SV147 |
| 7-D2 | ED-349448 | D VARACTOR 1SV147 |
| 7-D3 | ED-349448 | D VARACTOR 1SV147<br>[V] |
| 7-D4 | ED-349448 | D VARACTOR 1SV147 |
| 7-L1 | EO-349461 | COIL FIX 2 LINK |
| 7-L2 | EO-349462 | COIL FIX 2 U147 |
| 7-L3 | EO-349461 | COIL FIX 2 LINK |
| 7-L4 | EO-349462 | COIL FIX 2 U147 |
| 7-L5 | EO-349462 | COIL FIX 2 U147<br>[V] |
| 7-L6 | EO-359056 | COIL FIX 1 LAL03NA 2R2M |
| 7-L7 | EO-353687 | COIL OSC 2 E525HN-110003 |
| 7-TR1 | ET-349449 | TR FET 2SK161 O,Y |
| 7-TR2 | ET-336869 | TR 2SC2999 C,D |
| 7-TR3 | ET-328265 | TR 2SC930 F |
| 7-TR4 | ET-349449 | TR FET 2SK161 O,Y |
| 7-T1 | EO-337640 | COIL IFT 119AC-15533X 10.7MHZ |

## 8. DECK P.C BOARD

| Ref. No. | Part No. | Description |
|---|---|---|
| 8-C41 | EC-347255 | C MC V F05 FM 151J 500DC |
| 8-C55 | EC-349631 | C PP V F10 ECQ-F 182J 630DC |
| 8-C56 | EC-347263 | C MC V F05 FM 221J 500DC |
| 8-D1 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D2 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D3 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D4 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D5 | ED-344280 | D SILICON H GMA-01-FY2 F05<br>[AC-M512 ONLY] |
| 8-D6 | ED-344280 | D SILICON H GMA-01-FY2 F05<br>[AC-M512 ONLY] |
| 8-D7 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D8 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D9 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D10 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D11 | ED-337267 | D ZENER H HZ4 A1 |
| 8-D12 | ED-346551 | D ZENER H HZ11L B3 |
| 8-D13 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D14 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D16 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D17 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D18 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D200 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-FL1 | EH-336776 | FILTER DB D07003K 100KHZ |
| 8-FL2 | EO-356809 | COIL FIX 1 100Z-121 100.00KHZ |
| 8-FL3 | EH-336776 | FILTER DB D07003K 100KHZ |
| 8-FR1 | *ER-200926 | R FUSE H S10 ERD2FC 1/4W 27R0G |
| 8-IC1 | EI-369608 | IC BA3416BL |
| 8-IC2 | EI-373214 | IC HA12086 |
| 8-IC3 | EI-346071 | IC M5218L-21 |
| 8-IC4 | EI-304657 | IC TC4011BP |
| 8-IC5 | EI-304657 | IC TC4011BP |
| 8-IC6 | EI-304657 | IC TC4011BP<br>[AC-M512 ONLY] |
| 8-IC7 | EI-351569 | IC LC4001B |
| 8-L1 | EO-357050 | COIL FIX 1 RC875 822J |
| 8-L2 | EO-373247 | COIL FIX 1 RC87 [illegible]<br>[AC-M512 O |
| 8-L3 | EO-318380 | COIL FIX 1 LAL |
| 8-L4 | EO-345931 | COIL FIX 1 LAL03KH 2 |
| 8-TR1 | ET-360067 | TR 2SC3330 T,U F05<br>[AC-M512 ONLY] |
| 8-TR2 | ET-347143 | TR 2SC1845 E,F |
| 8-TR3 | ET-347143 | TR 2SC1845 E,F |
| 8-TR4 | ET-355626 | TR 2SA992 E,F |
| 8-TR5 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR6 | ET-350795 | TR 2SC3399 F05 |
| 8-TR7 | ET-350795 | TR 2SC3399 F05 |
| 8-TR8 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR9 | ET-363953 | TR DTA114TS |
| 8-TR10 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR11 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR12 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR13 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR14 | ET-363953 | TR DTA114TS |
| 8-TR15 | ET-350795 | TR 2SC3399 F05 |
| 8-TR16 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR17 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR18 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR19 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR20 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR21 | ET-360067 | TR 2SC3330 T,U F05 |

| Ref. No. | Part No. | Description |
|---|---|---|
| 8-TR22 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR23 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR24 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR25 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR26 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR27 | ET-363953 | TR DTA114TS |
| 8-TR28 | ET-363953 | TR DTA114TS |
| 8-TR29 | ET-350795 | TR 2SC3399 F05 |
| 8-TR30 | ET-350795 | TR 2SC3399 F05 |
| 8-TR31 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR32 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR33 | ET-349366 | TR 2SC3402 F05 |
| 8-TR34 | ET-349366 | TR 2SC3402 F05 |
| 8-TR35 | *ET-310148 | TR 2SD612K E,F |
| 8-TR36 | ET-363953 | TR DTA114TS |
| 8-TR37 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR38 | ET-360067 | TR 2SC3330 T,U F05<br>[AC-M512 ONLY] |
| 8-TR39 | ET-350795 | TR 2SC3399 F05 |
| 8-TR40 | ET-363953 | TR DTA114TS |
| 8-TR41 | ET-308977 | TR 2SC2274K F F05 |
| 8-TR42 | ET-308977 | TR 2SC2274K F F05 |
| 8-TR43 | ET-310148 | TR 2SD612K E,F |
| 8-TR44 | ET-349366 | TR 2SC3402 F05 |
| 8-TR45 | ET-349366 | TR 2SC3402 F05 |
| 8-TR46 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR47 | ET-350795 | TR 2SC3399 F05 |
| 8-TR48 | ET-360399 | TR DTC114TS<br>[AC-M512 ONLY] |
| 8-TR49 | ET-360399 | TR DTC114TS<br>[AC-M512 ONLY] |
| 8-TR50 | ET-353899 | TR 2SA1317 S,T,U<br>[AC-M512 ONLY] |
| 8-TR51 | ET-350795 | TR 2SC3399 F05 |
| 8-TR52 | ET-310148 | TR 2SD612K E,F |
| 8-TR53 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR54 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR55 | ET-350795 | TR 2SC3399 F05 |
| 8-TR60 | ET-353899 | TR 2SA1317 S,T,U<br>[AC-M512 ONLY] |
| 8-T1 | EO-349589 | COIL OSC 1 32-5016-12 |
| 8-VR1 | EV-522663 | R S-FIX V V8K1-1 3P 104 |
| 8-VR2 | EV-522663 | R S-FIX V V8K1-1 3P 104 |
| 8-VR3 | EV-572422 | R S-FIX V V8K1-1 3P 203 |
| 8-VR4 | EV-522663 | R S-FIX V V8K1-1 3P 104 |
| 8-VR5 | EV-522404 | R S-FIX V V8K1-1 3P 102<br>[AC-M512 ONLY] |
| 8-VR6 | EV-464253 | R S-FIX V V8K1-1 3P 202<br>[AC-M512 ONLY] |
| 8-VR7 | EV-522404 | R S-FIX V V8K1-1 3P 102<br>[AC-M512 ONLY] |
| 8-VR8 | EV-464253 | R S-FIX V V8K1-1 3P 202<br>[AC-M512 ONLY] |

## 9. DOLBY SW P.C BOARD

| Ref. No. | Part No. | Description |
|---|---|---|
| 9-D1 | ED-355426 | D LED PR-5705S-B7 RED<br>[REC] |
| 9-SW1 | ES-364176 | SW PUSH SPPH11 2-02-02N<br>[DOLBY NR] |
| 9-SW2 | ES-364176 | SW PUSH SPPH11 2-02-02N<br>[DUBBING SPEED][M512 ONLY] |

## 10. BEAT SW P.C BOARD

| Ref. No. | Part No. | Description |
|---|---|---|
| 10-SW1 | ES-501047 | SW SLIDE J-S5029#01 02-02N<br>[BEAT SW] |

## 11. LCD P.C BOARD

| Ref. No. | Part No. | Description |
|---|---|---|
| 11-BT1 | EZ-366626 | BATTERY LITHIUM BR2032-1VC |
| 11-D1 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 11-D2 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 11-D3 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 11-D4 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 11-D5 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 11-D6 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 11-D7 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 11-D8 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 11-D10 | ED-301911 | D SILICON H DS448<br>[L] |
| 11-D11 | ED-301911 | D SILICON H DS448<br>[C] |
| 11-IC1 | EI-363290 | IC TC9302AF-011-BS |
| 11-IN1 | EM-361644 | IND LCD 9419P |
| 11-IN2 | EL-362308 | PL CORD 14.0V 80MA L=80 |
| 11-TR1 | ET-353899 | TR 2SA1317 S,T,U<br>[U,Y7] |
| 11-X1 | EI-344422 | OSC X'TAL HC-18/U 7.200MHZ |

## 12. MAIN P.C BOARD

| Ref. No. | Part No. | Description |
|---|---|---|
| 12-C101 | EC-326583 | C MMY V CUT CF921 473K 400DC |
| 12-C103 | EC-324662 | C EC V CUT AS1 222M 25.0DC |
| 12-C107A | EC-358538 | C EC V CUT 472M 45.0DC<br>[AC-M312] |
| 12-C107B | EC-361665 | C EC V CUT 472M 50.0DC<br>[AC-M512] |
| 12-C109A | EC-358538 | C EC V CUT 472M 45.0DC<br>[AC-M312] |
| 12-C109B | EC-361665 | C EC V CUT 472M 50.0DC<br>[AC-M512] |
| 12-D101A | *ED-200213 | D SILICON DBA40C-K15 200/2.6A<br>[AC-M312] |
| 12-D101B | *ED-350748 | D SILICON DBA60C-K15 200/1.0A<br>[AC-M512] |
| 12-D102 | *ED-348200 | D SILICON DBA20C-K15 200/2.0A |
| 12-D103 | *ED-357754 | D SILICON DS135D 200/1.0A |
| 12-D104 | ED-301911 | D SILICON H DS448 |
| 12-D105 | ED-301911 | D SILICON H DS448 |
| 12-D106 | ED-301911 | D SILICON H DS448 |
| 12-D107 | ED-367552 | D ZENER H HZS15J B1 F05 |
| 12-D108 | ED-367552 | D ZENER H HZS15J B1 F05 |
| 12-D109 | ED-367552 | D ZENER H HZS15J B1 F05 |
| 12-D110 | ED-367552 | D ZENER H HZS15J B1 F05 |
| 12-D111 | ED-301911 | D SILICON H DS448 |
| 12-FR108 | *ER-319455 | R FUSE H S10 ERD2FC 1/4W 10R0G |
| 12-FR109 | *ER-319455 | R FUSE H S10 ERD2FC 1/4W 10R0G |
| 12-IC101 | *EI-366695 | IC STK4172II |
| 12-L101 | EO-337880 | COIL FIX 2 202AK-018 2R2K |
| 12-L102 | EO-342936 | COIL BALUM |
| 12-R103 | ER-337755 | R OMF H S20 FS 2W 222J<br>[AC-M512 ONLY] |
| 12-R133 | ER-324337 | R CB H S10 FS RDS 1/4W 560J |
| 12-R134 | ER-322332 | R CB H S10 FS RDS 1/4W 8R2J |

| Ref. No. | Part No. | Description |
|---|---|---|
| 12-R135 | ER-341940 | R OMF H S15 FS 1W 100J |
| 12-R136 | ER-341940 | R OMF H S15 FS 1W 100J |
| 12-TM101 | EJ-373203 | TERMINAL LEVER SQ2743#10<br>[SPEAKER] |
| 12-TR101 | ∗ET-366677 | TR 2SD1761 E,F |
| 12-TR102 | ∗ET-360067 | TR 2SC3330 T,U F05 |
| 12-TR103A | ∗ET-366581 | TR 2SD1762 E,F<br>[AC-M312] |
| 12-TR103B | ∗ET-366677 | TR 2SD1761 E,F<br>[AC-M512] |
| 12-TR104A | ∗ET-366365 | TR 2SB1185 E,F<br>[AC-M312] |
| 12-TR104B | ∗ET-373210 | TR 2SB1187 E,F<br>[AC-M512] |
| 12-TR105 | ∗ET-366581 | TR 2SD1762 E,F |
| 12-TR106 | ∗ET-360067 | TR 2SC3330 T,U F05 |
| 12-F6A | ∗EF-306952 | FUSE TSC A 250V 4.00A<br>[U,Y7] |
| 12-F7A | ∗EF-306952 | FUSE TSC A 250V 4.00A<br>[U,Y7] |
| 12-F3B | ∗EF-346115 | FUSE TSC 125V 6.30A<br>[C] |
| 12-F4B | ∗EF-346115 | FUSE TSC 125V 6.30A<br>[C] |
| 12-F5B | ∗EF-308847 | FUSE TSC 125V 1.60A<br>[C] |
| 12-F6B | ∗EF-306957 | FUSE TSC 125V 4.00A<br>[C] |
| 12-F7B | ∗EF-306957 | FUSE TSC 125V 4.00A<br>[C] |
| 12-F3C | ∗EF-690996 | FUSE SEMKO T 250V 4.00A<br>[E,V,S] |
| 12-F4C | ∗EF-690996 | FUSE SEMKO T 250V 4.00A<br>[E,V,S] |
| 12-F5C | ∗EF-602550 | FUSE SEMKO T 250V 1.25A<br>[E,V,S] |
| 12-F6C | ∗EF-691007 | FUSE SEMKO T 250V 3.15A<br>[E,V,S] |
| 12-F7C | ∗EF-691007 | FUSE SEMKO T 250V 3.15A<br>[E,V,S] |
| 12-F3D | ∗EF-359086 | FUSE BET T 250V 4.00A<br>[B] |
| 12-F4D | ∗EF-359086 | FUSE BET T 250V 4.00A<br>[B] |
| 12-F5D | ∗EF-359007 | FUSE BET T 250V 1.25A<br>[B] |
| 12-F6D | ∗EF-359225 | FUSE BET T 250V 3.15A<br>[B] |
| 12-F7D | ∗EF-359225 | FUSE BET T 250V 3.15A<br>[B] |

## 13. POWER SW P.C BOARD

| Ref. No. | Part No. | Description |
|---|---|---|
| 13-C150 | ∗EC-320548 | C CE V F 103Z 250AC<br>[U,Y7] |
| 13-C150A | ∗EC-338411 | C CE V FZ 103P 400AC<br>[C] |
| 13-C150B | ∗EC-338496 | C CE V FZ 472P 400AC<br>[E,S,V] |
| 13-L150 | ∗EO-338409 | COIL LF FKOB160MH02 250UH<br>[AC-M512L] |
| 13-R150 | ∗ER-356573 | R SD ANTI-STATIC 1/2W 225K<br>[C] |
| 13-SW150 | ∗ES-361797 | SW PUSH SDDLD1 1-01<br>[POWER] |
| 13-F1A | ∗EF-306950 | FUSE TSC A 250V 2.00A<br>[U,Y7] |
| 13-F2A | ∗EF-306950 | FUSE TSC A 250V 2.00A<br>[U,Y7] |
| 13-F1B | ∗EF-323080 | FUSE TSC 125V 3.15A<br>[C] |
| 13-F1C | ∗EF-602550 | FUSE SEMKO T 250V 1.25A<br>[E,V,S] |
| 13-F1D | ∗EF-359007 | FUSE BET T 250V 1.25A<br>[B] |

## 14. HEADPHONE P.C BOARD

| Ref. No. | Part No. | Description |
|---|---|---|
| 14-J160 | EJ-373208 | PHONE J HLJ2318-3040<br>[PHONES] |
| 14-R160 | ER-351221 | R OMF H S15 FS 1W 221J |

## 15. ENCODER VOLUME P.C BOARD

| Ref. No. | Part No. | Description |
|---|---|---|
| 15-VR170 | EV-366676 | VR ROTARY VB161GPH25F 3B 104<br>[VOLUME][AC-M312] |
| 15-VR180 | EV-366768 | VR ROTARY V12L5GS256F3B100KX2<br>[VOLUME][AC-M512] |

## 16. GRAPHIC EQ P.C BOARD

| Ref. No. | Part No. | Description |
|---|---|---|
| 16-IC1 | EI-359053 | IC LA3600 |
| 16-TR1 | ET-338324 | TR 2SD1012-V H F05 |

## 17. CONTROL P.C BOARD

| Ref. No. | Part No. | Description |
|---|---|---|
| 17-D12 | ED-365107 | D LED SLP-384C-50 GREEN |
| 17-D13 | ED-365107 | D LED SLP-384C-50 GREEN |
| 17-D14 | ED-365107 | D LED SLP-384C-50 GREEN |
| 17-D15 | ED-365107 | D LED SLP-384C-50 GREEN |
| 17-D16 | ED-373169 | D LED SLP-336C-20 GREEN |
| 17-D17 | ED-373169 | D LED SLP-336C-20 GREEN |
| 17-D18 | ED-373169 | D LED SLP-336C-20 GREEN |
| 17-D19 | ED-373169 | D LED SLP-336C-20 GREEN |
| 17-D20 | ED-301911 | D SILICON H DS448<br>[AC-M512 ONLY] |
| 17-IC2 | EI-345551 | IC LB1403 |
| 17-IC3 | EI-373215 | IC HD74LS145P<br>[AC-M312 ONLY] |
| 17-IC4 | EI-366767 | IC LM6416E-1976<br>[AC-M512 ONLY] |
| 17-L1 | EO-345920 | COIL FIX 1 LAL03KH 330K<br>[AC-M512 ONLY] |
| 17-R12 | ER-321619 | R OMF H S15 FS 1W 101J |
| 17-TR2 | ET-350795 | TR 2SC3399 F05<br>[AC-M512 ONLY] |
| 17-TR3 | ET-349592 | TR 2SC3400 F05<br>[AC-M512 ONLY] |
| 17-TR4 | ET-360137 | TR 2SC3330 U,V F05<br>[AC-M512 ONLY] |
| 17-TR5 | ET-360137 | TR 2SC3330 U,V F05<br>[AC-M512 ONLY] |
| 17-TR6 | ET-360137 | TR 2SC3330 U,V F05<br>[AC-M512 ONLY] |
| 17-TR7 | ET-360137 | TR 2SC3330 U,V F05<br>[AC-M512 ONLY] |
| 17-TR8 | ET-360137 | TR 2SC3330 U,V F05<br>[AC-M512 ONLY] |
| 17-TS1 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS2 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS3 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS4 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS5 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS6 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS7 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS8 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS9 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS10 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS11 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS12 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS13 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS14 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS15 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS16 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS17 | ES-349474 | SW TACT SKHHAM004A |
| 17-X2 | EI-337017 | OSC CE CSB800A 0.800000MHZ<br>[AC-M512 ONLY] |

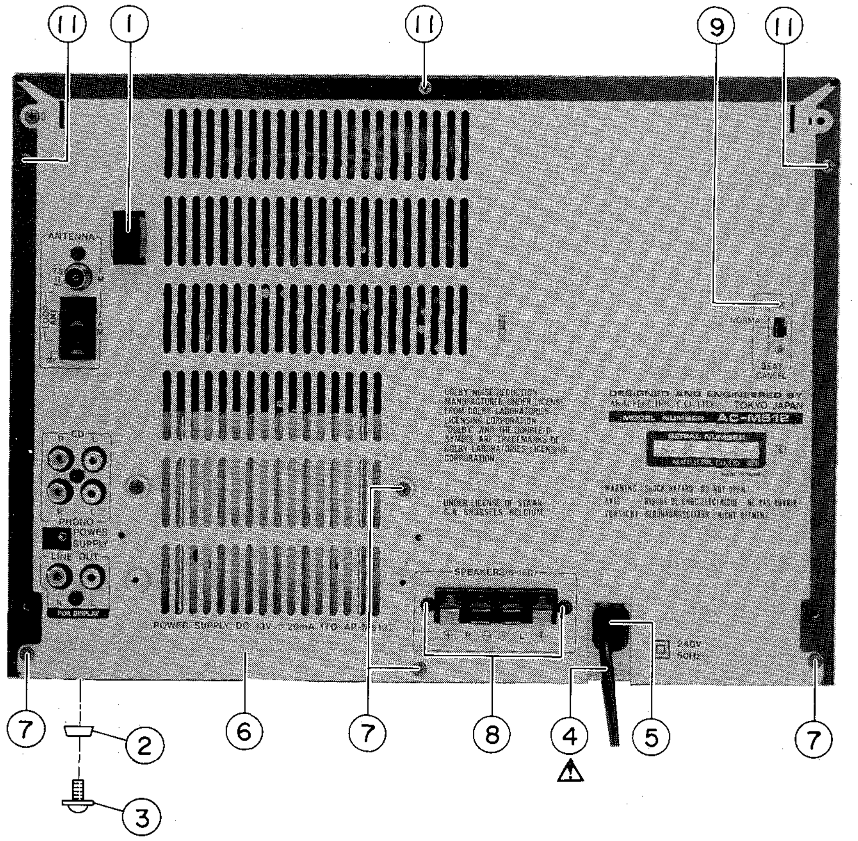
## 18. DETECTOR P.C BOARD

| Ref. No. | Part No. | Description |
|---|---|---|
| 18-D21 | ED-360409 | D PHOTO PN323B<br>[AC-M512 ONLY] |
| 18-IC5 | EI-367271 | IC UPC1490HA<br>[AC-M512 ONLY] |

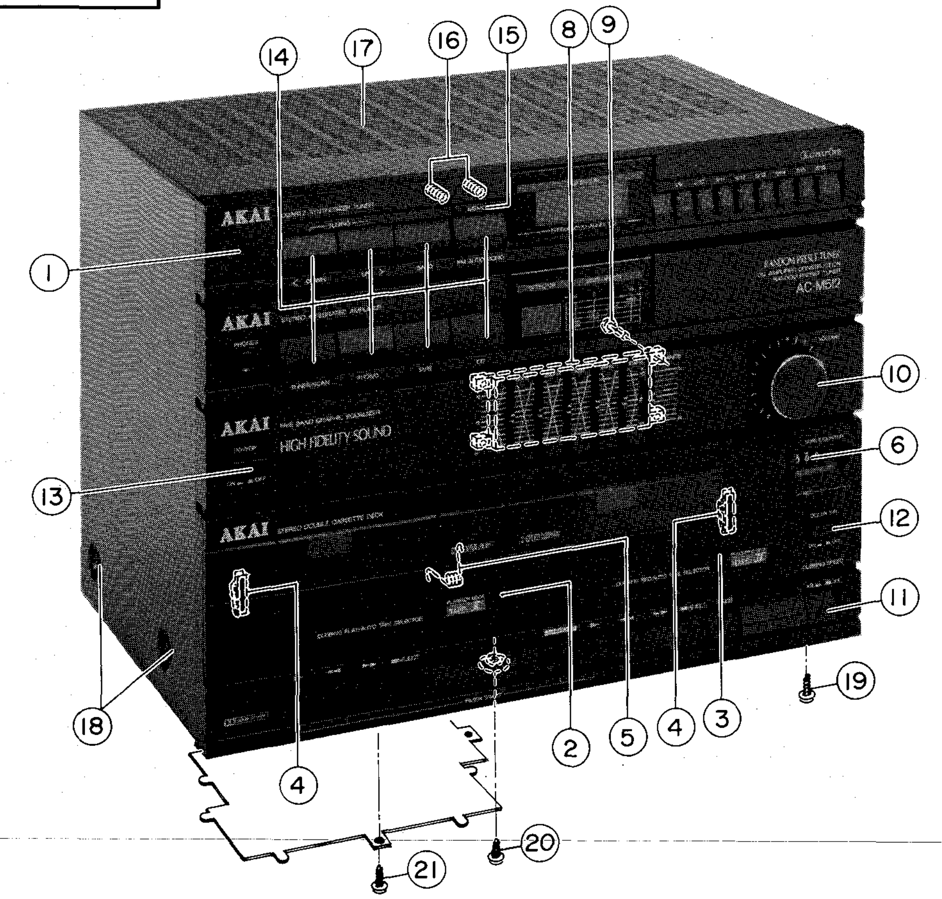
## 19. ASSEMBLY BLOCK

| Ref. No. | Part No. | Description |
|---|---|---|
| 19-1 | SZ-362273 | HOLDER ANTENNA (2) |
| 19-2 | SA-349332 | FOOT |
| 19-3 | ZS-498273 | T2BR30X08STL CMT PW080 |
| 19-4A | *EW-374894 | AC CORD 2C VM-0129A,VFF U/T<br>[U] |
| 19-4B | *EW-367500 | AC CORD200 KP10WSPT2 UC<br>[C] |
| 19-4C | *EW-336923 | AC CORD 2C KP-419C,LTCE-2F EV<br>[E,V] |
| 19-4D | *EW-347898 | AC CORD 2 CORES VM-0436,LCFL S<br>[S] |
| 19-4E | *EW-347025 | AC CORD 2 CORES LTBS-2F B<br>[B] |
| 19-4F | *EW-368470 | AC CORD200 KP8H LTCE B Y7<br>[Y7] |
| 19-5 | *EZ-371605 | BUSH CORD 2271 |
| 19-6A | SP-500371A | PANEL REAR AC-M312(U) (TW) |
| 19-6B | SP-500371B | PANEL REAR AC-M312(C,A) (TW) |
| 19-6C | SP-500371C | PANEL REAR AC-M312(E,V) (TW) |
| 19-6D | SP-500371D | PANEL REAR AC-M312(S) (TW) |
| 19-6E | SP-500371E | PANEL REAR AC-M312L(E) (TW) |
| 19-6F | SP-500371F | PANEL REAR AC-M312L(B) (TW) |
| 19-6G | SP-500371G | PANEL REAR AC-M512(U) (TW) |
| 19-6H | SP-500371H | PANEL REAR AC-M512(C) (TW) |
| 19-6J | SP-500371J | PANEL REAR AC-M512(E,V) (TW) |
| 19-6K | SP-500371K | PANEL REAR AC-M512(S) (TW) |
| 19-6L | SP-500371L | PANEL REAR AC-M512L(E) (TW) |
| 19-6M | SP-500371M | PANEL REAR AC-M512L(B) (TW) |
| 19-6Y | SP-500371Y | PANEL REAR AC-M312(Y7) (TW) |
| 19-6Z | SP-500371Z | PANEL REAR AC-M512(Y7) (TW) |
| 19-7 | ZS-308846 | T2BR30X08STL BZN PROJECTION |
| 19-8 | ZS-351886 | PT BR30X10STL BNI |
| 19-9 | ZS-460440 | PAN20X04STL CMT |
| 19-SW901 | *ES-349070 | SW SELECTOR YKS11-0002 02-4<br>[U,Y7] |
| 19-T901A | *BT-500434 | TRANS POWER C1016-U<br>[AC-M312] |
| 19-T901B | *BT-500435 | TRANS POWER C1016-C<br>[AC-M312] |
| 19-T901C | *BT-500436 | TRANS POWER C1016-E,V<br>[AC-M312] |
| 19-T901D | *BT-500437 | TRANS POWER C1016-B,S<br>[AC-M312] |
| 19-T901E | *BT-500830 | TRANS POW C1016-Y7 (TW)<br>[AC-M312] |
| 19-T901F | *BT-500438 | TRANS POWER C1017-U<br>[AC-M512] |
| 19-T901G | *BT-500439 | TRANS POWER C1017-C<br>[AC-M512] |
| 19-T901H | *BT-500440 | TRANS POWER C1017-E,V<br>[AC-M512] |
| 19-T901J | *BT-500441 | TRANS POWER C1017-B,S<br>[AC-M512] |
| 19-T901K | *BT-500831 | TRANS POW C1017-Y7<br>[AC-M512] |
| 19-10 | ZS-314702 | ST BID40X10STL CMT<br>[TRANS FIX] |
| 19-11 | ZS-308846 | T2BR30X08STL BZN PROJECTION |

## ASSEMBLY BLOCK



## FINAL ASSEMBLY BLOCK



## 20. FINAL ASSEMBLY BLOCK

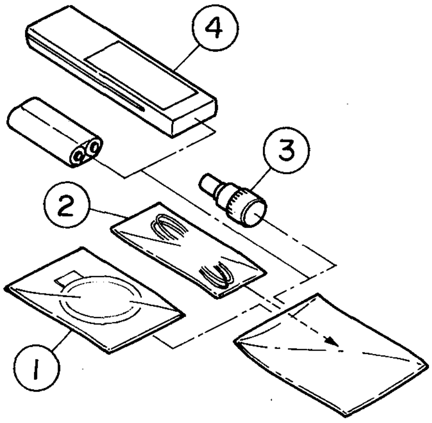
| Ref. No. | Part No. | Description |
|---|---|---|
| 20-1A-B | BD-C1016A090A | TW PANEL FRONT BLK AC-M312-B [INCL. 2,3] |
| 20-1A-W | BD-C1016A090H | TW PANEL FRONT BLK AC-M312-W [INCL. 2,3] |
| 20-1B-B | BD-C1016A090B | TW PANEL FRONT BLK AC-M312L-B [INCL. 2,3] |
| 20-1B-W | BD-C1016A090J | TW PANEL FRONT BLK AC-M312L-W [INCL. 2,3] |
| 20-1C-B | BD-C1016A090C | TW PANEL FRONT BLK AC-M512-B [INCL. 2,3] |
| 20-1C-W | BD-C1016A090K | TW PANEL FRONT BLK AC-M512-W [INCL. 2,3] |
| 20-1D-B | BD-C1016A090D | TW PANEL FRONT BLK AC-M512L-B [INCL. 2,3] |
| 20-1D-W | BD-C1016A090L | TW PANEL FRONT BLK AC-M512L-W [INCL. 2,3] |
| 20-2A-B | BD-B500410C | TW PANEL LID 312L-B PART |
| 20-2A-W | BD-B500410S | PANEL LID 312L-W PART (TW) |
| 20-2B-B | BD-B500410G | TW PANEL LID 512L-B PART |
| 20-2B-W | BD-B500410U | PANEL LID 512L-W PART (TW) |
| 20-3A-B | BD-500410D | PANEL LID 312R-B (TW) |
| 20-3A-W | BD-500410T | PANEL LID 312R-W (TW) |
| 20-3B-B | BD-500410H | PANEL LID 512R-B (TW) |
| 20-3B-W | BD-500410V | PANEL LID 512R-W (TW) |
| 20-4 | ZG-336615 | SP PLATE CASSETTE HOLDER (B) |
| 20-5 | ZG-500384 | SP TORSION LID (TW) |
| 20-6 | MC-500465 | COUNTER T3SG100-130B1-789 (TW) |
| 20-7 | ZS-336614 | PT PAN26X08STL CMT [COUNTER FIX] |
| 20-8 | EV-366674 | VR SPL 6THROW V JK252-5G(6) |
| 20-9 | ZS-331875 | PT BR30X12STL CMT [G. EQ VR FIX] |
| 20-10-B | SK-B362413A2 | KNOB VOLUME-B PART [BLACK] |
| 20-10-W | SK-B362413A1 | KNOB VOLUME PART [WHITE] |
| 20-11-B | SK-500417B | KNOB DUBBING (B) (TW) [BLACK][AC-M512] |
| 20-11-W | SK-500417C | KNOB DUBBING(W) (TW) [WHITE][AC-M512] |
| 20-12-B | SK-500409B | KNOB DOLBY (B) (TW) [BLACK] |
| 20-12-W | SK-500409D | KNOB DOLBY(W) (TW) [WHITE] |
| 20-13-B | SB-358882C-A | BUTTON PUSH(3) [BLACK] |
| 20-13-W | SK-500423D | KNOB POW(W) (TW) [WHITE] |
| 20-14-B | SK-500412B | KNOB FUNCTION (B) (TW) [BLACK] |
| 20-14-W | SK-500412D | KNOB FUNCTION(W) (TW) [WHITE] |
| 20-15-B | SK-500415B | KNOB MEMORY (B) (TW) [BLACK] |
| 20-15-W | SK-500415C | KNOB MEMORY(W) (TW) [WHITE] |
| 20-16 | ZG-500388 | SP PUSH MEMORY (TW) |
| 20-17-B | SP-500372B | COVER (B) (TW) [BLACK] |
| 20-17-W | SP-500372C | COVER (W) (TW) [WHITE] |
| 20-18 | ZS-322580 | ST BID40X08STL BNI |
| 20-19 | ZS-498273 | T2BR30X08STL CMT PW080 [FRONT PANEL FIX] |
| 20-20 | ZS-308846 | T2BR30X08STL BZN PROJECTION |
| 20-21 | ZS-447840 | T2BR30X08STL CMT |

SYMBOL FOR COLOR VARIATION

B : BLACK
W : WHITE

## 21. ACCEAASRY

| Ref. No. | Part No. | Description |
|---|---|---|
| 21-1 | EE-373213 | ANT LOOP AC-M312 |
| 21-2 | EE-315329 | ANT DIPOLE SAE-010 |
| 21-3 | EJ-352118 | SOCKET COAX PAL B2-714P-900 |
| 21-4 | AX-500546 | REMOCON *C1017 WIRELESS-B (TW) [AC-M512 ONLY] |

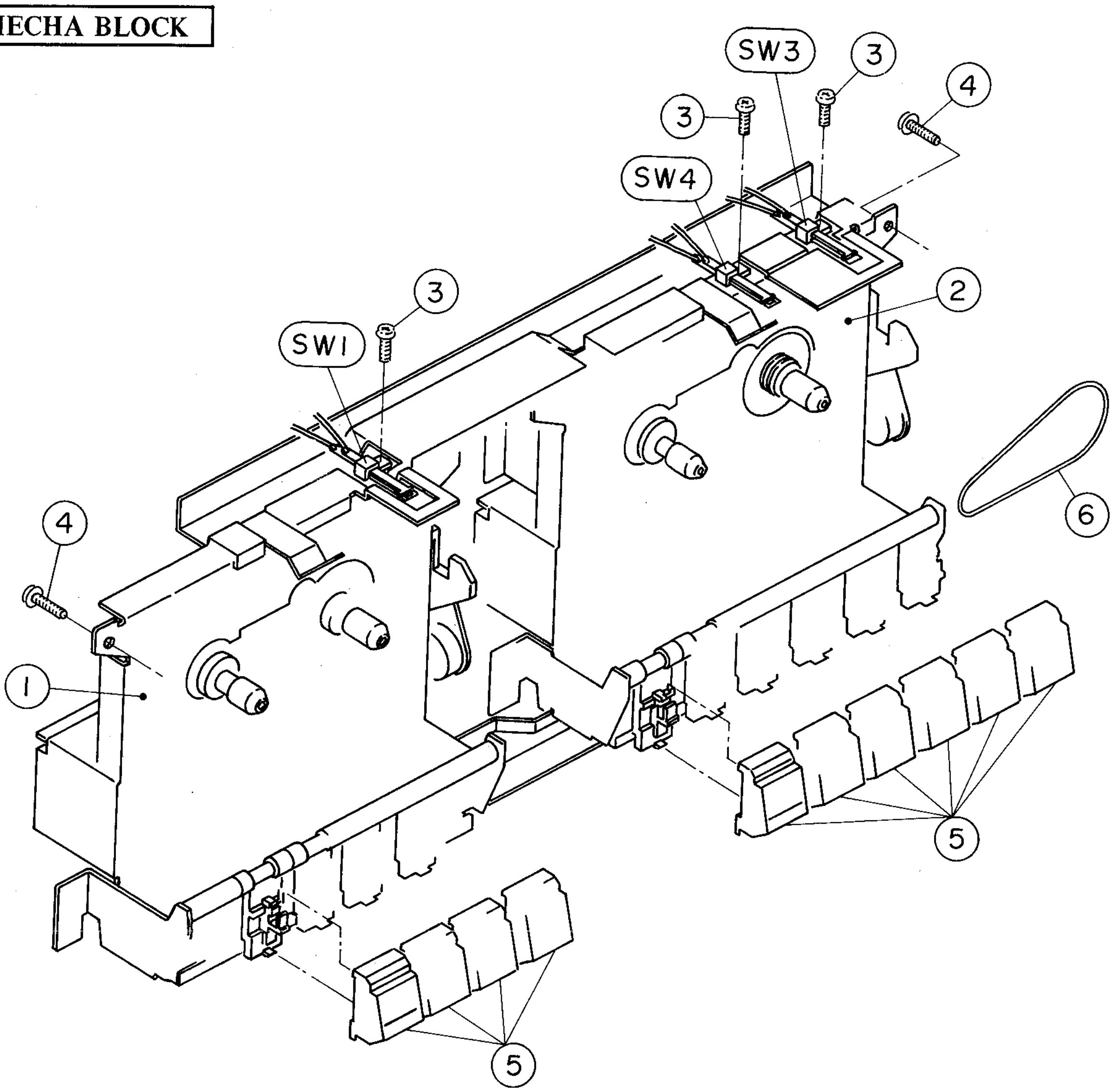


# MODEL AC-A510/L

## 1. RECOMMENDED SPARE PARTS

| Ref. No. | Part No. | Description |
|---|---|---|
| 1 | AX-500546 | REMOCON *C1017 WIRELESS-B (TW) |
| 2 | BB-500471 | MECHA AKI-052FMB BLK (TW) |
| 3 | BB-500472 | MECHA AKI-053FMB BLK (TW) |
| 4 | BF-720036 | FLYWHEEL ASSY |
| 5 | BM-720046 | MOTOR AC-M512 |
| 6 | BM-720050 | MOTOR AC-M312 |
| 7 | BR-720032 | SUPPLY REEL TABLE BLK AC-M312 |
| 8 | BR-720034 | TAKE-UP REEL TABLE BLK AC-M312 |
| 9 | *BT-500438 | TRANS POWER C1017-U |
| 10 | *BT-500439 | TRANS POWER C1017-C |
| 11 | *BT-500440 | TRANS POWER C1017-E,V |
| 12 | *BT-500441 | TRANS POWER C1017-B,S |
| 13 | *BT-500831 | TRANS POW C1017-Y7 |
| 14 | BZ-720035 | CLUTCH ASSY BLK AC-M312 |
| 15 | BZ-720037 | PINCH ROLLER ARM ASSY |
| 16 | ED-355426 | D LED PR-5705S-B7 RED |
| 17 | ED-373169 | D LED SLP-336C-20 GREEN |
| 18 | ED-365107 | D LED SLP-384C-50 GREEN |
| 19 | ED-360409 | D PHOTO PN323B |
| 20 | *ED-348200 | D SILICON DBA20C-K15 200/2.0A |
| 21 | *ED-350748 | D SILICON DBA60C-K15 200/1.0A |
| 22 | *ED-357754 | D SILICON DS135D 200/1.0A |
| 23 | ED-301911 | D SILICON H DS448 |
| 24 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 25 | ED-349448 | D VARACTOR 1SV147 |
| 26 | ED-349460-A | D VARACTOR SVC321SPA ABCD DBL |
| 27 | ED-337267 | D ZENER H HZ4 A1 |
| 28 | ED-319167 | D ZENER H HZ6 C3 |
| 29 | ED-321180 | D ZENER H HZ9 B2 |
| 30 | ED-346538 | D ZENER H HZ9L A2 |
| 31 | ED-346551 | D ZENER H HZ11L B3 |
| 32 | ED-367552 | D ZENER H HZS15J B1 F05 |
| 33 | EE-F0131E010A | TW PC FRONT END BLK FE31(U) |
| 34 | EE-F0141E010B | TW PC FRONT END BLK FE41(V) [V] |
| 35 | *EF-306950 | FUSE TSC A 250V 2.00A [U,Y7] |
| 36 | *EF-306952 | FUSE TSC A 250V 4.00A [U,Y7] |
| 37 | *EF-308847 | FUSE TSC 125V 1.60A [C] |
| 38 | *EF-323080 | FUSE TSC 125V 3.15A [C] |
| 39 | *EF-306957 | FUSE TSC 125V 4.00A [C] |
| 40 | *EF-346115 | FUSE TSC 125V 6.30A [C] |
| 41 | *EF-623125 | FUSE SEMKO T 250V 2.50A [E,V,S] |
| 42 | *EF-249851 | FUSE SEMKO T 250V 5.00A [E,V,S] |
| 43 | *EF-364518 | FUSE BET T 250V 2.50A [B] |
| 44 | *EF-355399 | FUSE BET T 250V 5.00A [B] |
| 45 | EH-344434 | FILTER CE BFU450C4N 0.450MHZ |
| 46 | EH-355568 | FILTER CE SFE10.7MS2G-A |
| 47 | EH-338338 | FILTER CE SFE10.7MS3GK-A |
| 48 | EH-336776 | FILTER DB D07003K 100KHZ |
| 49 | EH-360924 | FILTER LC BP BPMB6A |
| 50 | EH-501321 | FILTER LC LP L351Y015(FB-7DG) |
| 51 | EH-501323 | FILTER LC LP L351Y016(FB-7DG) |
| 52 | EI-369608 | IC BA3416BL |
| 53 | EI-373214 | IC HA12086 |
| 54 | EI-361624 | IC LA1265 |
| 55 | EI-359053 | IC LA3600 |
| 56 | EI-345551 | IC LB1403 |
| 57 | EI-351569 | IC LC4001B |
| 58 | EI-366767 | IC LM6416E-1976 |
| 59 | EI-346071 | IC M5218L-21 |
| 60 | EI-349719 | IC M5218P |
| 61 | EI-344764 | IC M5218P-21 |
| 62 | *EI-366695 | IC STK4172II |
| 63 | EI-359683 | IC TA7343AP |
| 64 | EI-304657 | IC TC4011BP |
| 65 | EI-332259 | IC TC4052BP |
| 66 | EI-363289 | IC TC9172 |
| 67 | EI-351966 | IC TC9176P |
| 68 | EI-363290 | IC TC9302AF-011-BS |
| 69 | EI-367271 | IC UPC1490HA |
| 70 | EI-337017 | OSC CE CSB800A 0.800000MHZ |
| 71 | EI-344422 | OSC X'TAL HC-18/U 7.200MHZ |
| 72 | EJ-359031 | TERMINAL LEVER YKD31-0215 P 2P |
| 73 | EJ-373203 | TERMINAL LEVER SQ2743#10 |
| 74 | EM-361644 | IND LCD 9419P |
| 76 | *ER-319455 | R FUSE H S10 ERD2FC 1/4W 10R0G |
| 77 | ES-720041 | SW LEAF LSA-1119F |
| 78 | ES-717768 | SW LEAF LSA-1119R-1 |
| 79 | ES-366789 | SW LEAF LSA-1132EAU |
| 80 | ES-364176 | SW PUSH SPPH11 2-02-02N |
| 81 | ES-361797 | SW PUSH SDDLD1 1-01 |
| 82 | *ES-349070 | SW SELECTOR YKS11-0002 02-4 [U] |
| 83 | ES-363292 | SW SLIDE 00120156 01-2 |
| 84 | ES-501047 | SW SLIDE J-S5029#01 02-02N |
| 85 | ES-349474 | SW TACT SKHHAM004A |
| 86 | ET-363953 | TR DTA114TS |
| 87 | ET-360399 | TR DTC114TS |
| 88 | ET-336869 | TR 2SC2999 C,D |
| 89 | ET-349449 | TR FET 2SK161 O,Y |
| 90 | ET-337759 | TR FET 2SK246 GR |
| 91 | ET-353899 | TR 2SA1317 S,T,U |
| 92 | ET-355626 | TR 2SA992 E,F |
| 93 | ET-373210 | TR 2SB1187 E,F |
| 94 | ET-347143 | TR 2SC1845 E,F |
| 95 | ET-308977 | TR 2SC2274K F F05 |
| 96 | ET-338410 | TR 2SC2878 A,B |
| 97 | ET-360067 | TR 2SC3330 T,U F05 |
| 98 | ET-360137 | TR 2SC3330 U,V F05 |
| 99 | ET-351872 | TR 2SC3383 R,S |
| 100 | ET-350795 | TR 2SC3399 F05 |
| 101 | ET-349592 | TR 2SC3400 F05 |
| 102 | ET-349366 | TR 2SC3402 F05 |
| 103 | ET-328265 | TR 2SC930 F |
| 104 | ET-338324 | TR 2SD1012-V H F05 |
| 105 | ET-310148 | TR 2SD612K E,F |
| 106 | EV-366674 | VR SPL 6THROW V JK252-5G(6) |
| 107 | EV-366768 | VR ROTARY V12L5GS256F3B100KX2 |
| 108 | EZ-366626 | BATTERY LITHIUM BR2032-1VC |
| 109 | HE-720049 | HEAD E |
| 110 | HP-720048 | HEAD R/P |
| 111 | HP-720051 | HEAD R/P |
| 112 | MB-500390 | BELT (TW) |
| 113 | MB-720039 | BELT AUTO |
| 114 | MB-720042 | BELT DRIVE |
| 115 | MB-720040 | BELT FR |
| 116 | MC-500465 | COUNTER T3SG100-130B1-789 (TW) |

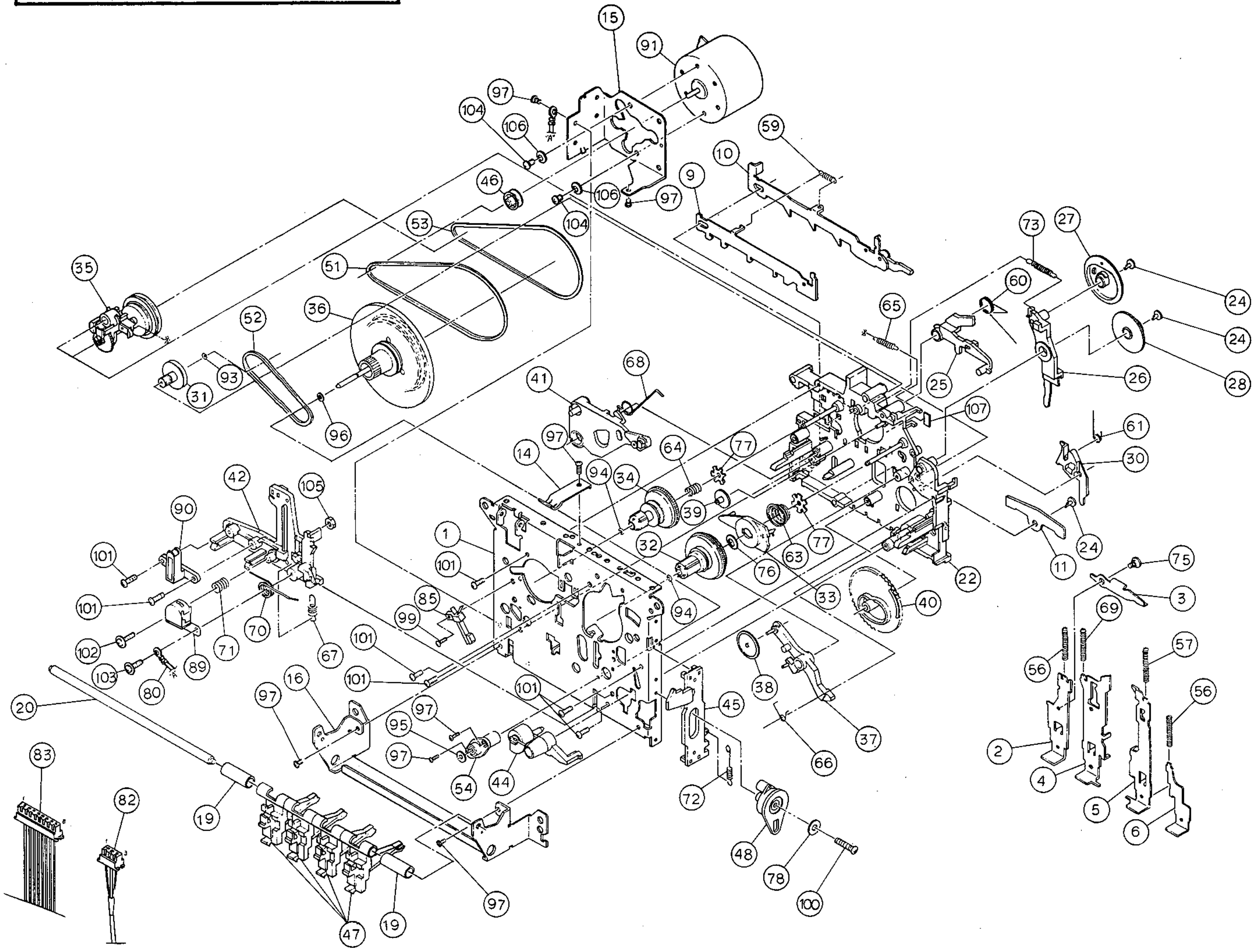
## MECHA BLOCK



## 2. MECHA BLOCK

| Ref. No. | Part No. | Description |
|---|---|---|
| 2-1 | BB-500472 | MECHA AKI-053FMB BLK (TW) |
| 2-2 | BB-500471 | MECHA AKI-052FMB BLK (TW) |
| 2-SW1 | ES-366789 | SW LEAF LSA-1132EAU<br>[TAPE 1 70U] |
| 2-SW3 | ES-366789 | SW LEAF LSA-1132EAU<br>[TAPE 2 70U] |
| 2-SW4 | ES-366789 | SW LEAF LSA-1132EAU<br>[TAPE 2 METAL] |
| 2-3 | ZS-201275 | ST PAN26X06STL CMT<br>[LEAF SW FIX] |
| 2-4 | ZS-323993 | PT BR30X10STL CMT<br>[MECHA BLOCK FIX] |
| 2-5-B | SK-500406B | KNOB OPERATION (B) (TW) |
| 2-6 | MB-500390 | BELT (TW)<br>[COUNTER BELT] |

## TAPE I MECHA BLOCK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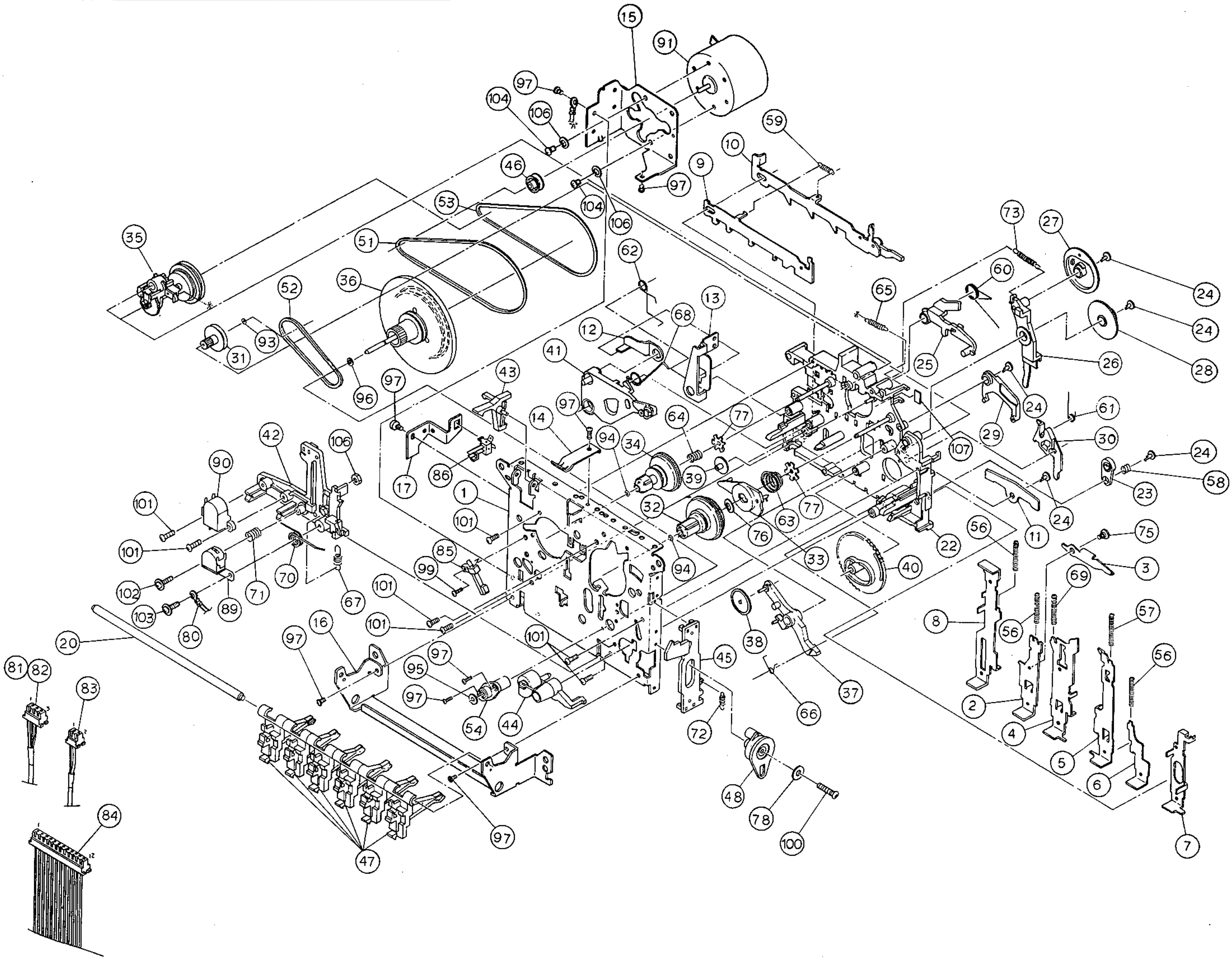
## 3. TAPE I MECHA BLOCK

| Ref. No. | Part No. | Description |
|---|---|---|
| 3-32 | BR-720034 | TAKE-UP REEL TABLE BLK AC-M312 |
| 3-34 | BR-720032 | SUPPLY REEL TABLE BLK AC-M312 |
| 3-35 | BZ-720035 | CLUTCH ASSY BLK AC-M312 |
| 3-36 | BF-720036 | FLYWHEEL ASSY |
| 3-44 | BZ-720037 | PINCH ROLLER ARM ASSY |
| 3-51 | MB-720042 | BELT DRIVE |
| 3-52 | MB-720039 | BELT AUTO |
| 3-53 | MB-720040 | BELT FR |
| 3-85 | ES-720041 | SW LEAF LSA-1119F<br>[SW2 MUTE] |
| 3-89 | HP-720051 | HEAD R/P<br>[H901] |
| 3-91 | BM-720046 | MOTOR AC-M512 |

# TAPE II MECHA BLOCK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## 4. TAPE II MECHA BLOCK

| Ref. No. | Part No. | Description |
|---|---|---|
| 4-32 | BR-720034 | TAKE-UP REEL TABLE BLK AC-M312 |
| 4-34 | BR-720032 | SUPPLY REEL TABLE BLK AC-M312 |
| 4-35 | BZ-720035 | CLUTCH ASSY BLK AC-M312 |
| 4-36 | BF-720036 | FLYWHEEL ASSY |
| 4-44 | BZ-720037 | PINCH ROLLER ARM ASSY |
| 4-51 | MB-720042 | BELT DRIVE |
| 4-52 | MB-720039 | BELT AUTO |
| 4-53 | MB-720040 | BELT FR |
| 4-85 | ES-720041 | SW LEAF LSA-1119F<br>[SW5 MUTE] |
| 4-86 | ES-717768 | SW LEAF LSA-1119R-1<br>[SW6 REC] |
| 4-89 | HP-720048 | HEAD R/P<br>[H902] |
| 4-90 | HE-720049 | HEAD E<br>[H903] |
| 4-91 | BM-720050 | MOTOR AC-M312 |

## 5. P.C BOARD BLOCK

| Ref. No. | Part No. | Description |
|---|---|---|
| 5-1A | BA-C1020A070A | TW PC BASE(510)BLK AC-A510(U) [U,Y7] |
| 5-1B | BA-C1020A070B | TW PC BASE(510)BLK AC-A510(C) [C] |
| 5-1C | BA-C1020A070C | TW PC BASE(510)BLK AC-A510(E) [E] |
| 5-1D | BA-C1020A070D | TW PC BASE(510) BLK AC-A510(V) [V] |
| 5-1E | BA-C1020A070E | TW PC BASE(510)BLK AC-A510(S) [S] |
| 5-1F | BA-C1020A070F | TW PC BASE(510)BLK AC-A510L [E,V] |
| 5-2A | EE-F0131E010A | TW PC FRONT END BLK FE31(U) [U,Y7,C,E,S] |
| 5-2B | EE-F0141E010B | TW PC FRONT END BLK FE41(V) [V] |
| 5-3A | BA-C1017A030A | TW PC#DECK(512) BLK AC-M512(U) [U,Y7] |
| 5-3B | BA-C1017A030B | TW PC# DECK(512)BLK AC-M512(C) [C] |
| 5-3C | BA-C1017A030C | TW PC#DECK(512)BLK AC-M512(E) [E,S] |
| 5-3D | BA-C1017A030D | TW PC#DECK(512)BLK AC-M512(V) [V] |
| 5-3E | BA-C1017A030E | TW PC#DECK(512)BLK AC-M512L |
| 5-4A | BA-C1017A020A | TW PC#MAIN(512)BLK AC-M512(U) [U,Y7] |
| 5-4B | BA-C1017A020B | TW PC#MAIN(512)BLK AC-M512(C) [C] |
| 5-4C | BA-C1017A020C | TW PC#MAIN(512)BLK AC-M512(E) [E,S] |
| 5-4D | BA-C1017A020D | TW PC#MAIN(512)BLK AC-M512(V) [V] |
| 5-4E | BA-C1017A020E | TW PC#MAIN(512)BLK AC-M502L(B) |
| 5-5 | BA-C1016A040C | TW PC# CONTROL(A)BLK AC-A510 |

PC (#) DECK BLK CONSISTS OF FOLLOWING P.C BOARD.

- DECK P.C BOARD
- DOLBY SW P.C BOARD
- BEAT SW P.C BOARD
- LCD P.C BOARD

PC (#) MAIN BLK CONSISTS OF FOLLOWING P.C BOARD.

- MAIN P.C BOARD
- DOLBY SW P.C BOARD
- POWER SW P.C BOARD
- HEADPHONE P.C BOARD
- ENCODER VOLUME P.C BOARD

PC (#) CONTROL BLK CONSISTS OF FOLLOWING P.C BOARD.

- CONTROL P.C BOARD
- DETECTOR P.C BOARD
- MEMORY SW P.C BOARD

## 6. BASE P.C BOARD

| Ref. No. | Part No. | Description |
|---|---|---|
| 6-D1 | ED-349460-A | D VARACTOR SVC321SPA ABCD DBL |
| 6-D2 | ED-349460-A | D VARACTOR SVC321SPA ABCD DBL |
| 6-D3 | ED-344280 | D SILICON H GMA-01-FY2 F05 [L ONLY] |
| 6-D4 | ED-344280 | D SILICON H GMA-01-FY2 F05 [L ONLY] |
| 6-D5 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 6-D6 | ED-344280 | D SILICON H GMA-01-FY2 F05 [L ONLY] |
| 6-D7 | ED-344280 | D SILICON H GMA-01-FY2 F05 [L ONLY] |
| 6-D8 | ED-321180 | D ZENER H HZ9 B2 |
| 6-D9 | ED-344280 | D SILICON H GMA-01-FY2 F05 [U,Y7] |
| 6-D10 | ED-301911 | D SILICON H DS448 |
| 6-D11 | ED-319167 | D ZENER H HZ6 C3 |
| 6-D101 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 6-D102 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 6-D103 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 6-D104 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 6-D105 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 6-D106 | ED-346538 | D ZENER H HZ9L A2 |
| 6-D107 | ED-346538 | D ZENER H HZ9L A2 |
| 6-D201 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 6-FL1 | EH-355568 | FILTER CE SFE10.7MS2G-A [U,C,E,S,Y7] |
| 6-FL1A | EH-338338 | FILTER CE SFE10.7MS3GK-A [V] |
| 6-FL2 | EH-355568 | FILTER CE SFE10.7MS2G-A |
| 6-FL3 | EH-344434 | FILTER CE BFU450C4N 0.450MHZ |
| 6-FL4 | EH-501321 | FILTER LC LP L351Y015(FB-7DG) |
| 6-FL5 | EH-501321 | FILTER LC LP L351Y015(FB-7DG) |
| 6-FL6 | EH-501323 | FILTER LC LP L351Y016(FB-7DG) [V] |
| 6-FL7 | EH-360924 | FILTER LC BP BPMB6A [V] |
| 6-IC1 | EI-361624 | IC LA1265 |
| 6-IC2 | EI-359683 | IC TA7343AP |
| 6-IC3 | EI-363289 | IC TC9172 |
| 6-IC101 | EI-344764 | IC M5218P-21 |
| 6-IC102 | EI-332259 | IC TC4052BP |
| 6-IC103 | EI-349719 | IC M5218P |
| 6-IC201 | EI-351966 | IC TC9176P |
| 6-IC202 | EI-349719 | IC M5218P |
| 6-IC301 | EI-332259 | IC TC4052BP |
| 6-J101 | EJ-501350 | PIN J PCB-204S P 4P [CD/PHONO IN] |
| 6-J103 | EJ-373207 | SOCKET INLET HEC0470-01-250 [POWER SUPPLY] |
| 6-L101 | EO-325760 | COIL FIX 1 LAL04 330K [V] |
| 6-R13 | ER-324184 | R CB H S10 FS RDS 1/4W 121J |
| 6-R23 | ER-333406 | R CB H S10 FS RDS 1/4W 363J |
| 6-R35 | ER-367512 | R CB H S12 FS RDS 1/2W 121J |
| 6-R57 | ER-306805 | R CB H S15 FS RDS 1/2W 101J |
| 6-R83 | ER-321192 | R OMF H S20 FS 2W 101J |
| 6-SW1 | ES-363292 | SW SLIDE 00120156 01-2 [AM STEPE U,Y7] |
| 6-TM1 | EJ-359031 | TERMINAL LEVER YKD31-0215 P 2P [ANTENNA] |
| 6-TR1 | ET-338410 | TR 2SC2878 A,B [L ONLY] |
| 6-TR2 | ET-349449 | TR FET 2SK161 O,Y [L ONLY] |
| 6-TR4 | ET-328265 | TR 2SC930 F |
| 6-TR5 | ET-360137 | TR 2SC3330 U,V F05 |
| 6-TR6 | ET-351872 | TR 2SC3383 R,S |
| 6-TR7 | ET-360137 | TR 2SC3330 U,V F05 |
| 6-TR8 | ET-351872 | TR 2SC3383 R,S |
| 6-TR9 | ET-353899 | TR 2SA1317 S,T,U |
| 6-TR10 | ET-353899 | TR 2SA1317 S,T,U |

| Ref. No. | Part No. | Description |
|---|---|---|
| 6-TR11 | ET-360137 | TR 2SC3330 U,V F05<br>[L ONLY] |
| 6-TR12 | ET-360137 | TR 2SC3330 U,V F05<br>[L ONLY] |
| 6-TR13 | ET-360137 | TR 2SC3330 U,V F05 |
| 6-TR14 | ET-360137 | TR 2SC3330 U,V F05 |
| 6-TR15 | ET-360137 | TR 2SC3330 U,V F05 |
| 6-TR16 | ET-337759 | TR FET 2SK246 GR |
| 6-TR17 | ET-351872 | TR 2SC3383 R,S |
| 6-TR18 | ET-360137 | TR 2SC3330 U,V F05 |
| 6-TR101 | ET-350795 | TR 2SC3399 F05 |
| 6-TR102 | ET-350795 | TR 2SC3399 F05 |
| 6-TR103 | ET-350795 | TR 2SC3399 F05 |
| 6-TR104 | ET-353899 | TR 2SA1317 S,T,U |
| 6-TR105 | ET-353899 | TR 2SA1317 S,T,U |
| 6-TR106 | *ET-360067 | TR 2SC3330 T,U F05 |
| 6-TR107 | *ET-353899 | TR 2SA1317 S,T,U |
| 6-T1 | EO-356732 | COIL IFT BCFLZ-450A |
| 6-T2 | EO-501338 | COIL VARI 2 Y36(CSM-10C) |
| 6-T3 | EO-501339 | COIL VARI 2 Y037(SM-10C)<br>[L ONLY] |
| 6-T4 | EO-363279 | COIL OSC 2 A7NRS-9857X 150.0UH |
| 6-T5 | EO-352089 | COIL OSC 2 7BRS-9098X 580.0UH<br>[L ONLY] |
| 6-T6 | EO-373196 | COIL DET 2 195AEA-1133FGL |
| 6-T7 | EO-373197 | COIL DET 2 YTKAEAS-35879X |
| 6-VC1 | EC-363329 | C S-FIX H CTC-64-010 2.5-10 |
| 6-VC1A | EC-363331 | C S-FIX H CTC-6U-030 5.5-30<br>[L ONLY] |
| 6-VC2 | EC-363331 | C S-FIX H CTC-6U-030 5.5-30<br>[L ONLY] |
| 6-VR1 | EV-367499 | R S-FIX H V6EKPV(1S) 3P 472 |
| 6-VR2 | EV-367499 | R S-FIX H V6EKPV(1S) 3P 472 |

## 7. FRONT END P.C BOARD

| Ref. No. | Part No. | Description |
|---|---|---|
| 7-D1 | ED-349448 | D VARACTOR 1SV147 |
| 7-D2 | ED-349448 | D VARACTOR 1SV147 |
| 7-D3 | ED-349448 | D VARACTOR 1SV147<br>[V] |
| 7-D4 | ED-349448 | D VARACTOR 1SV147 |
| 7-L1 | EO-349461 | COIL FIX 2 LINK |
| 7-L2 | EO-349462 | COIL FIX 2 U147 |
| 7-L3 | EO-349461 | COIL FIX 2 LINK |
| 7-L4 | EO-349462 | COIL FIX 2 U147 |
| 7-L5 | EO-349462 | COIL FIX 2 U147<br>[V] |
| 7-L6 | EO-359056 | COIL FIX 1 LAL03NA 2R2M |
| 7-L7 | EO-353687 | COIL OSC 2 E525HN-110003 |
| 7-TR1 | ET-349449 | TR FET 2SK161 O,Y |
| 7-TR2 | ET-336869 | TR 2SC2999 C,D |
| 7-TR3 | ET-328265 | TR 2SC930 F |
| 7-TR4 | ET-349449 | TR FET 2SK161 O,Y |
| 7-T1 | EO-337640 | COIL IFT 119AC-15533X 10.7MHZ |

## 8. DECK P.C BOARD

| Ref. No. | Part No. | Description |
|---|---|---|
| 8-C41 | EC-347255 | C MC V F05 FM 151J 500DC |
| 8-C55 | EC-349631 | C PP V F10 ECQ-F 182J 630DC |
| 8-C56 | EC-347263 | C MC V F05 FM 221J 500DC |
| 8-D1 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D2 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D3 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D4 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D5 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D6 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D7 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D8 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D9 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D10 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D11 | ED-337267 | D ZENER H HZ4 A1 |
| 8-D12 | ED-346551 | D ZENER H HZ11L B3 |
| 8-D13 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D14 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D16 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D17 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D18 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-D200 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 8-FL1 | EH-336776 | FILTER DB D07003K 100KHZ |
| 8-FL2 | EO-356809 | COIL FIX 1 100Z-121 100.00KHZ |
| 8-FL3 | EH-336776 | FILTER DB D07003K 100KHZ |
| 8-FR1 | *ER-200926 | R FUSE H S10 ERD2FC 1/4W 27R0G |
| 8-IC1 | EI-369608 | IC BA3416BL |
| 8-IC2 | EI-373214 | IC HA12086 |
| 8-IC3 | EI-346071 | IC M5218L-21 |
| 8-IC4 | EI-304657 | IC TC4011BP |
| 8-IC5 | EI-304657 | IC TC4011BP |
| 8-IC6 | EI-304657 | IC TC4011BP |
| 8-IC7 | EI-351569 | IC LC4001B |
| 8-L1 | EO-357050 | COIL FIX 1 RC875 822J |
| 8-L2 | EO-373247 | COIL FIX 1 RC875 272J |
| 8-L3 | EO-318380 | COIL FIX 1 LAL04 271K |
| 8-L4 | EO-345931 | COIL FIX 1 LAL03KH 221K |
| 8-TR1 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR2 | ET-347143 | TR 2SC1845 E,F |
| 8-TR3 | ET-347143 | TR 2SC1845 E,F |
| 8-TR4 | ET-355626 | TR 2SA992 E,F |
| 8-TR5 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR6 | ET-350795 | TR 2SC3399 F05 |
| 8-TR7 | ET-350795 | TR 2SC3399 F05 |
| 8-TR8 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR9 | ET-363953 | TR DTA114TS |
| 8-TR10 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR11 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR12 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR13 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR14 | ET-363953 | TR DTA114TS |
| 8-TR15 | ET-350795 | TR 2SC3399 F05 |
| 8-TR16 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR17 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR18 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR19 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR20 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR21 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR22 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR23 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR24 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR25 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR26 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR27 | ET-363953 | TR DTA114TS |
| 8-TR28 | ET-363953 | TR DTA114TS |
| 8-TR29 | ET-350795 | TR 2SC3399 F05 |
| 8-TR30 | ET-350795 | TR 2SC3399 F05 |
| 8-TR31 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR32 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR33 | ET-349366 | TR 2SC3402 F05 |
| 8-TR34 | ET-349366 | TR 2SC3402 F05 |
| 8-TR35 | *ET-310148 | TR 2SD612K E,F |
| 8-TR36 | ET-363953 | TR DTA114TS |
| 8-TR37 | ET-360067 | TR 2SC3330 T,U F05 |

| Ref. No. | Part No. | Description |
|---|---|---|
| 8-TR38 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR39 | ET-350795 | TR 2SC3399 F05 |
| 8-TR40 | ET-363953 | TR DTA114TS |
| 8-TR41 | ET-308977 | TR 2SC2274K F F05 |
| 8-TR42 | ET-308977 | TR 2SC2274K F F05 |
| 8-TR43 | ET-310148 | TR 2SD612K E,F |
| 8-TR44 | ET-349366 | TR 2SC3402 F05 |
| 8-TR45 | ET-349366 | TR 2SC3402 F05 |
| 8-TR46 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR47 | ET-350795 | TR 2SC3399 F05 |
| 8-TR48 | ET-360399 | TR DTC114TS |
| 8-TR49 | ET-360399 | TR DTC114TS |
| 8-TR50 | ET-353899 | TR 2SA1317 S,T,U |
| 8-TR51 | ET-350795 | TR 2SC3399 F05 |
| 8-TR52 | ET-310148 | TR 2SD612K E,F |
| 8-TR53 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR54 | ET-360067 | TR 2SC3330 T,U F05 |
| 8-TR55 | ET-350795 | TR 2SC3399 F05 |
| 8-TR60 | ET-353899 | TR 2SA1317 S,T,U |
| 8-T1 | EO-349589 | COIL OSC 1 32-5016-12 |
| 8-VR1 | EV-522663 | R S-FIX V V8K1-1 3P 104 |
| 8-VR2 | EV-522663 | R S-FIX V V8K1-1 3P 104 |
| 8-VR3 | EV-572422 | R S-FIX V V8K1-1 3P 203 |
| 8-VR4 | EV-522663 | R S-FIX V V8K1-1 3P 104 |
| 8-VR5 | EV-522404 | R S-FIX V V8K1-1 3P 102 |
| 8-VR6 | EV-464253 | R S-FIX V V8K1-1 3P 202 |
| 8-VR7 | EV-522404 | R S-FIX V V8K1-1 3P 102 |
| 8-VR8 | EV-464253 | R S-FIX V V8K1-1 3P 202 |

## 9. DOLBY SW P.C BOARD

| Ref. No. | Part No. | Description |
|---|---|---|
| 9-D1 | ED-355426 | D LED PR-5705S-B7 RED [REC] |
| 9-SW1 | ES-364176 | SW PUSH SPPH11 2-02-02N [DOLBY NR] |
| 9-SW2 | ES-364176 | SW PUSH SPPH11 2-02-02N [DUBBING SPEED] |

## 10. BEAT SW P.C BOARD

| Ref. No. | Part No. | Description |
|---|---|---|
| 10-SW1 | ES-501047 | SW SLIDE J-S5029#01 02-02N [BEAT SW] |

## 11. LCD P.C BOARD

| Ref. No. | Part No. | Description |
|---|---|---|
| 11-BT1 | EZ-366626 | BATTERY LITHIUM BR2032-1VC |
| 11-D1 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 11-D2 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 11-D3 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 11-D4 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 11-D5 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 11-D6 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 11-D7 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 11-D8 | ED-344280 | D SILICON H GMA-01-FY2 F05 |
| 11-D10 | ED-301911 | D SILICON H DS448 [L] |
| 11-D11 | ED-301911 | D SILICON H DS448 [C] |
| 11-IC1 | EI-363290 | IC TC9302AF-011-BS |
| 11-IN1 | EM-361644 | IND LCD 9419P |
| 11-IN2 | EL-362308 | PL CORD 14.0V 80MA L=80 |
| 11-TR1 | ET-353899 | TR 2SA1317 S,T,U [U,Y7] |
| 11-X1 | EI-344422 | OSC X'TAL HC-18/U 7.200MHZ |

## 12. MAIN P.C BOARD

| Ref. No. | Part No. | Description |
|---|---|---|
| 12-C101 | EC-326583 | C MMY V CUT CF921 473K 400DC |
| 12-C103 | EC-324662 | C EC V CUT AS1 222M 25.0DC |
| 12-C107 | EC-361665 | C EC V CUT 472M 50.0DC |
| 12-C109 | EC-361665 | C EC V CUT 472M 50.0DC |
| 12-D101 | *ED-350748 | D SILICON DBA60C-K15 200/1.0A |
| 12-D102 | *ED-348200 | D SILICON DBA20C-K15 200/2.0A |
| 12-D103 | *ED-357754 | D SILICON DS135D 200/1.0A |
| 12-D104 | ED-301911 | D SILICON H DS448 |
| 12-D105 | ED-301911 | D SILICON H DS448 |
| 12-D106 | ED-301911 | D SILICON H DS448 |
| 12-D107 | ED-367552 | D ZENER H HZS15J B1 F05 |
| 12-D108 | ED-367552 | D ZENER H HZS15J B1 F05 |
| 12-D109 | ED-367552 | D ZENER H HZS15J B1 F05 |
| 12-D110 | ED-367552 | D ZENER H HZS15J B1 F05 |
| 12-D111 | ED-301911 | D SILICON H DS448 |
| 12-FR108 | *ER-319455 | R FUSE H S10 ERD2FC 1/4W 10R0G |
| 12-FR109 | *ER-319455 | R FUSE H S10 ERD2FC 1/4W 10R0G |
| 12-IC101 | *EI-366695 | IC STK4172II |
| 12-L101 | EO-337880 | COIL FIX 2 202AK-018 2R2K |
| 12-L102 | EO-342936 | COIL BALUM |
| 12-R103 | ER-337755 | R OMF H S20 FS 2W 222J |
| 12-R133 | ER-324337 | R CB H S10 FS RDS 1/4W 560J |
| 12-R134 | ER-322332 | R CB H S10 FS RDS 1/4W 8R2J |
| 12-R135 | ER-341940 | R OMF H S15 FS 1W 100J |
| 12-R136 | ER-341940 | R OMF H S15 FS 1W 100J |
| 12-TM101 | EJ-373203 | TERMINAL LEVER SQ2743#10 [SPEAKER] |
| 12-TR101 | *ET-366677 | TR 2SD1761 E,F |
| 12-TR102 | *ET-360067 | TR 2SC3330 T,U F05 |
| 12-TR103 | *ET-366677 | TR 2SD1761 E,F |
| 12-TR104 | *ET-373210 | TR 2SB1187 E,F |
| 12-TR105 | *ET-366581 | TR 2SD1762 E,F |
| 12-TR106 | *ET-360067 | TR 2SC3330 T,U F05 |
| 12-F6A | *EF-306952 | FUSE TSC A 250V 4.00A [U,Y7] |
| 12-F7A | *EF-306952 | FUSE TSC A 250V 4.00A [U,Y7] |
| 12-F3B | *EF-346115 | FUSE TSC 125V 6.30A [C] |
| 12-F4B | *EF-346115 | FUSE TSC 125V 6.30A [C] |
| 12-F5B | *EF-308847 | FUSE TSC 125V 1.60A [C] |
| 12-F6B | *EF-306957 | FUSE TSC 125V 4.00A [C] |
| 12-F7B | *EF-306957 | FUSE TSC 125V 4.00A [C] |
| 12-F3C | *EF-249851 | FUSE SEMKO T 250V 5.00A [E,V,S] |
| 12-F4C | *EF-249851 | FUSE SEMKO T 250V 5.00A [E,V,S] |
| 12-F5C | *EF-623125 | FUSE SEMKO T 250V 2.50A [E,V,S] |
| 12-F6C | *EF-249851 | FUSE SEMKO T 250V 5.00A [E,V,S] |

| Ref. No. | Part No. | Description |
|---|---|---|
| 12-F7C | *EF-249851 | FUSE SEMKO T 250V 5.00A<br>[E,V,S] |
| 12-F3D | *EF-355399 | FUSE BET T 250V 5.00A<br>[B] |
| 12-F4D | *EF-355399 | FUSE BET T 250V 5.00A<br>[B] |
| 12-F5D | *EF-364518 | FUSE BET T 250V 2.50A<br>[B] |
| 12-F6D | *EF-355399 | FUSE BET T 250V 5.00A<br>[B] |
| 12-F7D | *EF-355399 | FUSE BET T 250V 5.00A<br>[B] |

## 13. POWER SW P.C BOARD

| Ref. No. | Part No. | Description |
|---|---|---|
| 13-C150 | *EC-320548 | C CE V F 103Z 250AC<br>[U,Y7] |
| 13-C150A | *EC-338411 | C CE V FZ 103P 400AC<br>[C] |
| 13-C150B | *EC-338496 | C CE V FZ 472P 400AC<br>[E,S,V] |
| 13-L150 | *EO-338409 | COIL LF FKOB160MH02 250UH<br>[AC-M512L] |
| 13-R150 | *ER-356573 | R SD ANTI-STATIC 1/2W 225K<br>[C] |
| 13-SW150 | *ES-361797 | SW PUSH SDDLD1 1-01<br>[POWER] |
| 13-F1A | *EF-306950 | FUSE TSC A 250V 2.00A<br>[U,Y7] |
| 13-F2A | *EF-306950 | FUSE TSC A 250V 2.00A<br>[U,Y7] |
| 13-F1B | *EF-323080 | FUSE TSC 125V 3.15A<br>[C] |
| 13-F1C | *EF-623125 | FUSE SEMKO T 250V 2.50A<br>[E,V,S] |
| 13-F1D | *EF-364518 | FUSE BET T 250V 2.50A<br>[B] |

## 14. HEADPHONE P.C BOARD

| Ref. No. | Part No. | Description |
|---|---|---|
| 14-J160 | EJ-373208 | PHONE J HLJ2318-3040<br>[PHONES] |
| 14-R160 | ER-351221 | R OMF H S15 FS 1W 221J |

## 15. ENCODER VOLUME P.C BOARD

| Ref. No. | Part No. | Description |
|---|---|---|
| 15-VR180 | EV-366768 | VR ROTARY V12L5GS256F3B100KX2<br>[VOLUME] |

## 16. GRAPHIC EQ P.C BOARD

| Ref. No. | Part No. | Description |
|---|---|---|
| 16-IC1 | EI-359053 | IC LA3600 |
| 16-TR1 | ET-338324 | TR 2SD1012-V H F05 |

## 17. CONTROL P.C BOARD

| Ref. No. | Part No. | Description |
|---|---|---|
| 17-D12 | ED-365107 | D LED SLP-384C-50 GREEN |
| 17-D13 | ED-365107 | D LED SLP-384C-50 GREEN |
| 17-D14 | ED-365107 | D LED SLP-384C-50 GREEN |
| 17-D15 | ED-365107 | D LED SLP-384C-50 GREEN |
| 17-D16 | ED-373169 | D LED SLP-336C-20 GREEN |
| 17-D17 | ED-373169 | D LED SLP-336C-20 GREEN |
| 17-D18 | ED-373169 | D LED SLP-336C-20 GREEN |
| 17-D19 | ED-373169 | D LED SLP-336C-20 GREEN |
| 17-D20 | ED-301911 | D SILICON H DS448 |
| 17-IC2 | EI-345551 | IC LB1403 |
| 17-IC4 | EI-366767 | IC LM6416E-1976 |
| 17-L1 | EO-345920 | COIL FIX 1 LAL03KH 330K |
| 17-R12 | ER-321619 | R OMF H S15 FS 1W 101J |
| 17-TR2 | ET-350795 | TR 2SC3399 F05 |
| 17-TR3 | ET-349592 | TR 2SC3400 F05 |
| 17-TR4 | ET-360137 | TR 2SC3330 U,V F05 |
| 17-TR5 | ET-360137 | TR 2SC3330 U,V F05 |
| 17-TR6 | ET-360137 | TR 2SC3330 U,V F05 |
| 17-TR7 | ET-360137 | TR 2SC3330 U,V F05 |
| 17-TR8 | ET-360137 | TR 2SC3330 U,V F05 |
| 17-TS1 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS2 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS3 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS4 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS5 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS6 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS7 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS8 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS10 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS11 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS12 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS13 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS14 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS15 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS16 | ES-349474 | SW TACT SKHHAM004A |
| 17-TS17 | ES-349474 | SW TACT SKHHAM004A |
| 17-X2 | EI-337017 | OSC CE CSB800A 0.800000MHZ |

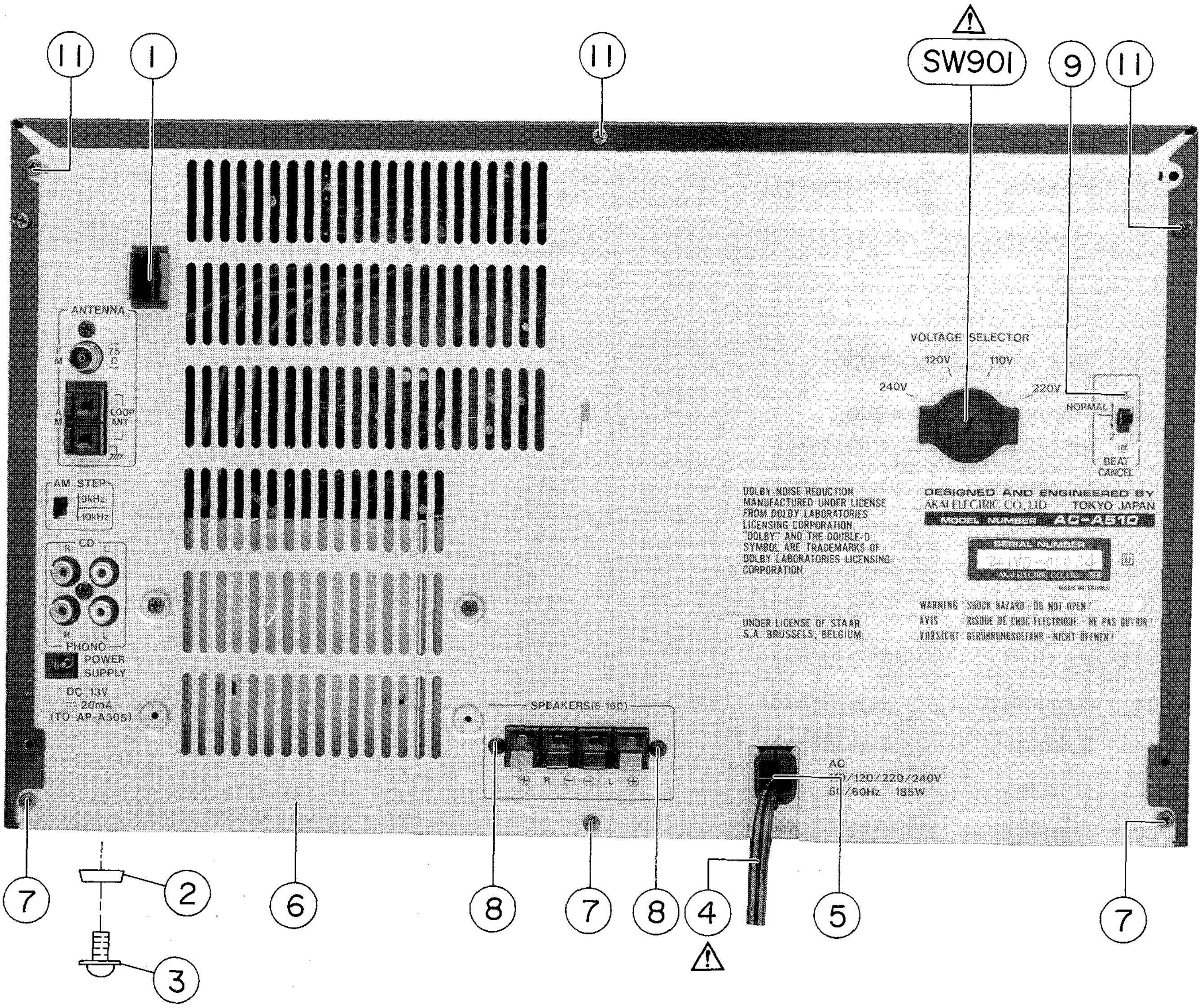
## 18. DETECTOR P.C BOARD

| Ref. No. | Part No. | Description |
|---|---|---|
| 18-D21 | ED-360409 | D PHOTO PN323B |
| 18-IC5 | EI-367271 | IC UPC1490HA |

## 19. MEMORY SW P.C BOARD

| Ref. No. | Part No. | Description |
|---|---|---|
| 19-TS9 | ES-349474 | SW TACT SKHHAM004A |

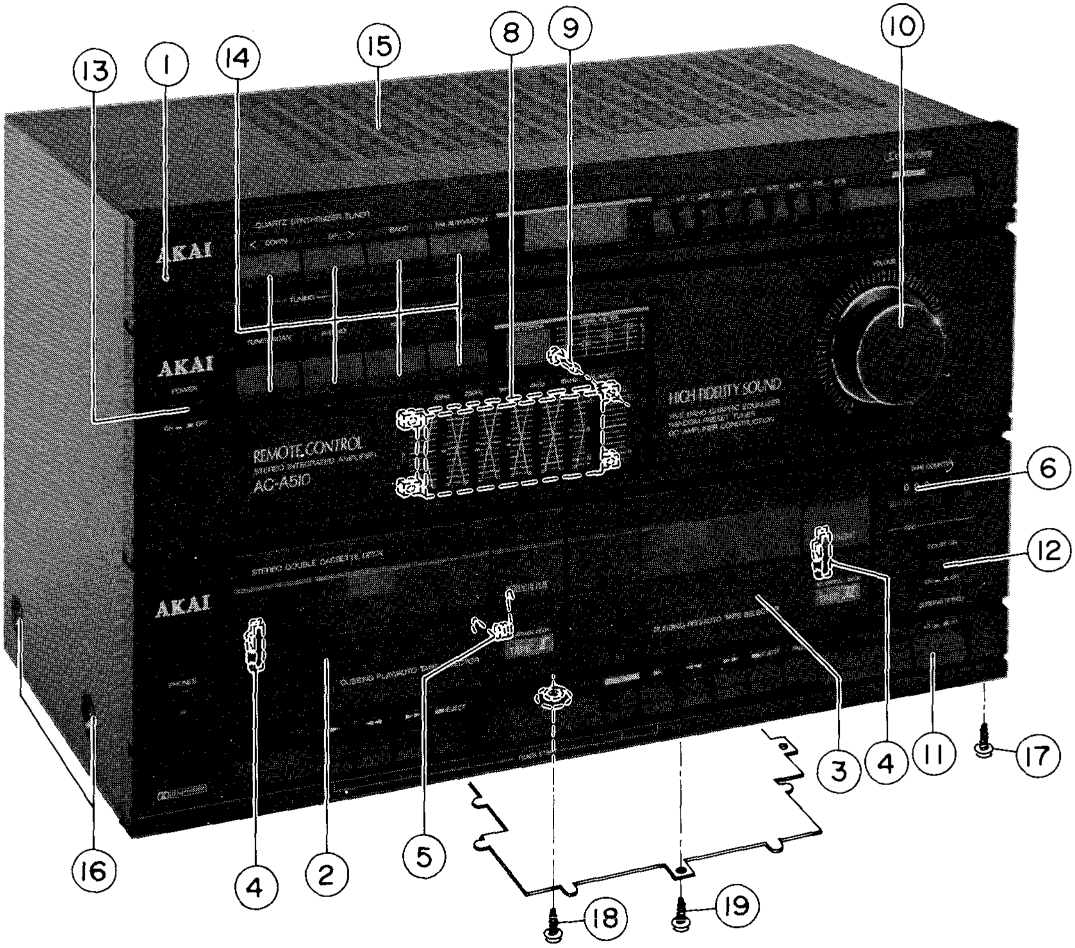
## ASSEMBLY BLOCK


11
1
11
SW901
9
11
ANTENNA
FM
75Ω
AM
LOOP ANT
AM STEP
9kHz
10kHz
CD
PHONO
POWER SUPPLY
DC 13V
20mA
(TO AP-A305)
VOLTAGE SELECTOR
120V
110V
240V
220V
NORMAL
BEAT CANCEL
DOLBY NOISE REDUCTION MANUFACTURED UNDER LICENSE FROM DOLBY LABORATORIES LICENSING CORPORATION. "DOLBY" AND THE DOUBLE-D SYMBOL ARE TRADEMARKS OF DOLBY LABORATORIES LICENSING CORPORATION.
DESIGNED AND ENGINEERED BY AKAI ELECTRIC CO., LTD. TOKYO JAPAN
MODEL NUMBER AC-A510
SERIAL NUMBER
UNDER LICENSE OF STAAR S.A. BRUSSELS, BELGIUM
WARNING: SHOCK HAZARD - DO NOT OPEN!
AVIS: RISQUE DE CHOC ELECTRIQUE - NE PAS OUVRIR!
VORSICHT: BERÜHRUNGSGEFAHR - NICHT ÖFFNEN!
SPEAKERS(6-16Ω)
R
L
AC
50/60Hz 185W
7
2
3
6
8
7
8
4
5
7

## 20. ASSEMBLY BLOCK

| Ref. No. | Part No. | Description |
|---|---|---|
| 20-1 | SZ-362273 | HOLDER ANTENNA (2) |
| 20-2 | SA-349332 | FOOT |
| 20-3 | ZS-498273 | T2BR30X08STL CMT PW080 |
| 20-4A | *EW-374894 | AC CORD 2C VM-0129A,VFF U/T<br>[U] |
| 20-4B | *EW-367500 | AC CORD200 KP10WSPT2 UC<br>[C] |
| 20-4C | *EW-347897 | AC CORD 2 CORES VM0364,LCFL EV<br>[E,V] |
| 20-4D | *EW-347898 | AC CORD 2 CORES VM-0436,LCFL S<br>[S] |
| 20-4E | *EW-347025 | AC CORD 2 CORES LTBS-2F B<br>[B] |
| 20-4F | *EW-368470 | AC CORD200 KP8H LTCE B Y7<br>[Y7] |
| 20-5 | *EZ-371605 | BUSH CORD 2271 |
| 20-6A | SP-500353A | PANEL REAR AC-A510(U) (TW) |
| 20-6B | SP-500353B | PANEL REAR AC-A510(C) (TW) |
| 20-6C | SP-500353C | PANEL REAR AC-A510(E,V) (TW) |
| 20-6D | SP-500353D | PANEL REAR AC-A510(S) (TW) |
| 20-6E | SP-500353E | PANEL REAR AC-A510L(E) (TW) |
| 20-6F | SP-500353F | PANEL REAR AC-A510L(B) (TW) |
| 20-6G | SP-500353J | PANEL REAR AC-A510(Y7) (TW) |
| 20-7 | ZS-308846 | T2BR30X08STL BZN PROJECTION |
| 20-8 | ZS-351886 | PT BR30X10STL BNI |
| 20-9 | ZS-460440 | PAN20X04STL CMT |
| 20-SW901 | *ES-349070 | SW SELECTOR YKS11-0002 02-4<br>[U,Y7] |
| 20-T901A | *BT-500438 | TRANS POWER C1017-U |
| 20-T901B | *BT-500439 | TRANS POWER C1017-C |
| 20-T901C | *BT-500440 | TRANS POWER C1017-E,V |
| 20-T901D | *BT-500441 | TRANS POWER C1017-B,S |
| 20-T901E | *BT-500831 | TRANS POW C1017-Y7 |
| 20-10 | ZS-314702 | ST BID40X10STL CMT<br>[TRANS FIX] |
| 20-11 | ZS-308846 | T2BR30X08STL BZN PROJECTION |

## FINAL ASSEMBLY BLOCK



## 21. FINAL ASSEMBLY BLOCK

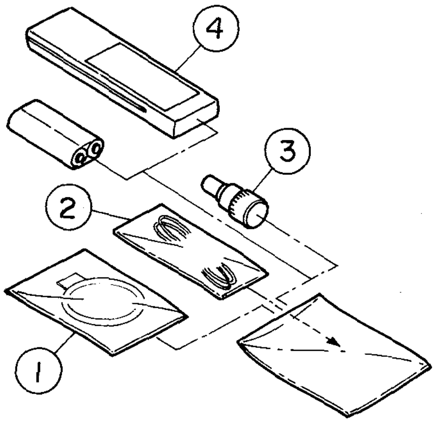
| Ref. No. | Part No. | Description |
|---|---|---|
| 21-1A-B | BD-C1016A090F | TW PANEL FRONT BLK AC-A510-B [INCL. 2,3] |
| 21-1B-B | BD-C1016A090G | TW PANEL FRONT BLK AC-A510L-B [INCL. 2,3] |
| 21-2-B | BD-500410L | PANEL LID 510L-B (TW) |
| 21-3-B | BD-500410M | PANEL LID 510R-B (TW) |
| 21-4 | ZG-336615 | SP PLATE CASSETTE HOLDER (B) |
| 21-5 | ZG-500384 | SP TORSION LID (TW) |
| 21-6 | MC-500465 | COUNTER T3SG100-130B1-789 (TW) |
| 21-7 | ZS-336614 | PT PAN26X08STL CMT [COUNTER FIX] |
| 21-8 | EV-366674 | VR SPL 6THROW V JK252-5G(6) |
| 21-9 | ZS-331875 | PT BR30X12STL CMT [G. EQ VR FIX] |
| 21-10-B | SK-500364B | KNOB VR (B) (TW) |
| 21-11-B | SK-500363B | KNOB DUBBING (B) (TW) |
| 21-12-B | SK-500409B | KNOB DOLBY (B) (TW) |
| 21-13-B | SB-358882C-A | BUTTON PUSH(3) |
| 21-14-B | SK-500412B | KNOB FUNCTION (B) (TW) |
| 21-15-B | SP-500355B | COVER (B) (TW) |
| 21-16 | ZS-322580 | ST BID40X08STL BNI |
| 21-17 | ZS-498273 | T2BR30X08STL CMT PW080 |
| 21-18 | ZS-308846 | T2BR30X08STL BZN PROJECTION |
| 21-19 | ZS-447840 | T2BR30X08STL CMT |

SYMBOL FOR COLOR VARIATION

B : BLACK

## 22. ACCESSARY

| Ref. No. | Part No. | Description |
|---|---|---|
| 22-1 | EE-373213 | ANT LOOP AC-M312 |
| 22-2 | EE-315329 | ANT DIPOLE SAE-010 |
| 22-3 | EJ-352118 | SOCKET COAX PAL B2-714P-900 |
| 22-4 | AX-500546 | REMOCON ∗C1017 WIRELESS-B (TW) |



# INDEX

| Part No. | Ref. No. |
|---|---|
| AX-500546 | 1 |
| AX-500546 | 21-4 |
| BA-C1016A020A | 5-4A |
| BA-C1016A020B | 5-4B |
| BA-C1016A020C | 5-4C |
| BA-C1016A020D | 5-4D |
| BA-C1016A030A | 5-3A |
| BA-C1016A030B | 5-3B |
| BA-C1016A030C | 5-3C |
| BA-C1016A030D | 5-3D |
| BA-C1016A030E | 5-3E |
| BA-C1016A040A | 5-5A |
| BA-C1016A040B | 5-5B |
| BA-C1016A070A | 5-1A |
| BA-C1016A070B | 5-1B |
| BA-C1016A070C | 5-1C |
| BA-C1016A070D | 5-1D |
| BA-C1016A070E | 5-1E |
| BA-C1016A070F | 5-1F |
| BA-C1017A020A | 5-4E |
| BA-C1017A020B | 5-4F |
| BA-C1017A020C | 5-4G |
| BA-C1017A020D | 5-4H |
| BA-C1017A030A | 5-3F |
| BA-C1017A030B | 5-3G |
| BA-C1017A030C | 5-3H |
| BA-C1017A030D | 5-3J |
| BA-C1017A030E | 5-3K |
| BA-C1017A070A | 5-1G |
| BA-C1017A070B | 5-1H |
| BA-C1017A070C | 5-1J |
| BA-C1017A070D | 5-1K |
| BA-C1017A070E | 5-1L |
| BA-C1017A070F | 5-1M |
| BB-500469 | 2 |
| BB-500469 | 2-2A |
| BB-500470 | 3 |
| BB-500470 | 2-1A |
| BB-500471 | 4 |
| BB-500471 | 2-2B |
| BB-500472 | 5 |
| BB-500472 | 2-1B |
| BD-B500410C | 20-2A-B |
| BD-B500410G | 20-2B-B |
| BD-B500410S | 20-2A-W |
| BD-B500410U | 20-2B-W |
| BD-C1016A090A | 20-1A-B |
| BD-C1016A090B | 20-1B-B |
| BD-C1016A090C | 20-1C-B |
| BD-C1016A090D | 20-1D-B |
| BD-C1016A090H | 20-1A-W |
| BD-C1016A090J | 20-1B-W |
| BD-C1016A090K | 20-1C-W |
| BD-C1016A090L | 20-1D-W |
| BD-500410D | 20-3A-B |
| BD-500410H | 20-3B-B |
| BD-500410T | 20-3A-W |
| BD-500410V | 20-3B-W |
| BF-720036 | 6 |
| BF-720036 | 3-36 |
| BF-720036 | 4-36 |
| BM-720046 | 8 |
| BM-720046 | 3-91B |
| BM-720046 | 4-91B |
| BM-720050 | 7 |
| BM-720050 | 3-91A |
| BM-720050 | 4-91A |
| BR-720032 | 9 |
| BR-720032 | 3-34 |
| BR-720032 | 4-34 |
| BR-720034 | 10 |
| BR-720034 | 3-32 |
| BR-720034 | 4-32 |
| BT-500434 | 11 |
| BT-500434 | 19-T901A |
| BT-500435 | 12 |
| BT-500435 | 19-T901B |
| BT-500436 | 13 |
| BT-500436 | 19-T901C |
| BT-500437 | 14 |
| BT-500437 | 19-T901D |
| BT-500438 | 16 |
| BT-500438 | 19-T901F |
| BT-500439 | 17 |
| BT-500439 | 19-T901G |
| BT-500440 | 18 |
| BT-500440 | 19-T901H |
| BT-500441 | 19-T901J |
| BT-500830 | 15 |
| BT-500830 | 19-T901E |
| BT-500831 | 19 |
| BT-500831 | 19-T901K |
| BZ-720035 | 20 |
| BZ-720035 | 3-35 |
| BZ-720035 | 4-35 |
| BZ-720037 | 21 |
| BZ-720037 | 3-44 |
| BZ-720037 | 4-44 |
| EC-320548 | 13-C150 |
| EC-324662 | 12-C103 |
| EC-326583 | 12-C101 |
| EC-338411 | 13-C150A |
| EC-338496 | 13-C150B |
| EC-347255 | 8-C41 |
| EC-347263 | 8-C56 |
| EC-349631 | 8-C55 |
| EC-358538 | 12-C107A |
| EC-358538 | 12-C109A |
| EC-361665 | 12-C107B |
| EC-361665 | 12-C109B |
| EC-363329 | 6-VC1 |
| EC-363331 | 6-VC1A |
| EC-363331 | 6-VC2 |
| ED-200213 | 27 |
| ED-200213 | 12-D101A |
| ED-301911 | 30 |
| ED-301911 | 6-D10 |
| ED-301911 | 11-D10 |
| ED-301911 | 11-D11 |
| ED-301911 | 12-D104 |
| ED-301911 | 12-D105 |
| ED-301911 | 12-D106 |
| ED-301911 | 12-D111 |
| ED-301911 | 17-D20 |
| ED-319167 | 35 |
| ED-319167 | 6-D11 |
| ED-321180 | 36 |
| ED-321180 | 6-D8 |
| ED-337267 | 34 |
| ED-337267 | 8-D11 |
| ED-344280 | 31 |
| ED-344280 | 6-D3 |
| ED-344280 | 6-D4 |
| ED-344280 | 6-D5 |
| ED-344280 | 6-D6 |
| ED-344280 | 6-D7 |
| ED-344280 | 6-D9 |
| ED-344280 | 6-D101 |
| ED-344280 | 6-D102 |
| ED-344280 | 6-D103 |
| ED-344280 | 6-D104 |
| ED-344280 | 6-D105 |
| ED-344280 | 6-D201 |
| ED-344280 | 8-D1 |
| ED-344280 | 8-D2 |
| ED-344280 | 8-D3 |
| ED-344280 | 8-D4 |
| ED-344280 | 8-D5 |
| ED-344280 | 8-D6 |
| ED-344280 | 8-D7 |
| ED-344280 | 8-D8 |
| ED-344280 | 8-D9 |
| ED-344280 | 8-D10 |
| ED-344280 | 8-D13 |
| ED-344280 | 8-D14 |
| ED-344280 | 8-D16 |
| ED-344280 | 8-D17 |
| ED-344280 | 8-D18 |
| ED-344280 | 8-D200 |
| ED-344280 | 11-D1 |
| ED-344280 | 11-D2 |
| ED-344280 | 11-D3 |
| ED-344280 | 11-D4 |
| ED-344280 | 11-D5 |
| ED-344280 | 11-D6 |
| ED-344280 | 11-D7 |
| ED-344280 | 11-D8 |
| ED-346538 | 37 |
| ED-346538 | 6-D106 |
| ED-346538 | 6-D107 |
| ED-346551 | 38 |
| ED-346551 | 8-D12 |
| ED-348200 | 26 |
| ED-348200 | 12-D102 |
| ED-349448 | 32 |
| ED-349448 | 7-D1 |
| ED-349448 | 7-D2 |
| ED-349448 | 7-D3 |
| ED-349448 | 7-D4 |
| ED-349460-A | 33 |
| ED-349460-A | 6-D1 |
| ED-349460-A | 6-D2 |
| ED-350748 | 28 |
| ED-350748 | 12-D101B |
| ED-355426 | 22 |
| ED-355426 | 9-D1 |
| ED-357754 | 29 |
| ED-357754 | 12-D103 |
| ED-360409 | 25 |
| ED-360409 | 18-D21 |
| ED-365107 | 24 |
| ED-365107 | 17-D12 |
| ED-365107 | 17-D13 |
| ED-365107 | 17-D14 |
| ED-365107 | 17-D15 |
| ED-367552 | 39 |
| ED-367552 | 12-D107 |
| ED-367552 | 12-D108 |
| ED-367552 | 12-D109 |
| ED-367552 | 12-D110 |
| ED-373169 | 23 |
| ED-373169 | 17-D16 |
| ED-373169 | 17-D17 |
| ED-373169 | 17-D18 |
| ED-373169 | 17-D19 |
| EE-F0131E010A | 40 |
| EE-F0131E010A | 5-2A |
| EE-F0141E010B | 41 |
| EE-F0141E010B | 5-2B |
| EE-315329 | 21-2 |
| EE-373213 | 21-1 |
| EF-306950 | 42 |
| EF-306950 | 13-F1A |
| EF-306950 | 13-F2A |
| EF-306952 | 43 |
| EF-306952 | 12-F6A |
| EF-306952 | 12-F7A |
| EF-306957 | 46 |
| EF-306957 | 12-F6B |
| EF-306957 | 12-F7B |
| EF-308847 | 44 |
| EF-308847 | 12-F5B |
| EF-323080 | 45 |
| EF-323080 | 13-F1B |
| EF-346115 | 47 |
| EF-346115 | 12-F3B |
| EF-346115 | 12-F4B |
| EF-359007 | 51 |
| EF-359007 | 12-F5D |
| EF-359007 | 13-F1D |
| EF-359086 | 53 |
| EF-359086 | 12-F3D |
| EF-359086 | 12-F4D |
| EF-359225 | 52 |
| EF-359225 | 12-F6D |
| EF-359225 | 12-F7D |
| EF-602550 | 48 |
| EF-602550 | 12-F5C |
| EF-602550 | 13-F1C |
| EF-690996 | 50 |
| EF-690996 | 12-F3C |
| EF-690996 | 12-F4C |
| EF-691007 | 49 |
| EF-691007 | 12-F6C |
| EF-691007 | 12-F7C |
| EH-336776 | 57 |
| EH-336776 | 8-FL1 |
| EH-336776 | 8-FL3 |
| EH-338338 | 56 |
| EH-338338 | 6-FL1A |
| EH-344434 | 54 |
| EH-344434 | 6-FL3 |
| EH-355568 | 55 |
| EH-355568 | 6-FL1 |
| EH-355568 | 6-FL2 |
| EH-360924 | 58 |
| EH-360924 | 6-FL7 |
| EH-501321 | 59 |
| EH-501321 | 6-FL4 |
| EH-501321 | 6-FL5 |
| EH-501323 | 60 |
| EH-501323 | 6-FL6 |
| EI-304657 | 74 |
| EI-304657 | 8-IC4 |
| EI-304657 | 8-IC5 |
| EI-304657 | 8-IC6 |
| EI-332259 | 75 |
| EI-332259 | 6-IC102 |
| EI-332259 | 6-IC301 |
| EI-337017 | 80 |
| EI-337017 | 17-X2 |
| EI-344422 | 81 |
| EI-344422 | 11-X1 |
| EI-344764 | 71 |
| EI-344764 | 6-IC101 |
| EI-345551 | 66 |
| EI-345551 | 17-IC2 |
| EI-346071 | 69 |
| EI-346071 | 8-IC3 |
| EI-349719 | 70 |
| EI-349719 | 6-IC103 |
| EI-349719 | 6-IC202 |
| EI-351569 | 67 |
| EI-351569 | 8-IC7 |
| EI-351966 | 77 |
| EI-351966 | 6-IC201 |
| EI-359053 | 65 |
| EI-359053 | 16-IC1 |
| EI-359683 | 73 |
| EI-359683 | 6-IC2 |
| EI-361624 | 64 |
| EI-361624 | 6-IC1 |
| EI-363289 | 76 |
| EI-363289 | 6-IC3 |
| EI-363290 | 78 |
| EI-363290 | 11-IC1 |
| EI-366695 | 72 |
| EI-366695 | 12-IC101 |
| EI-366767 | 68 |
| EI-366767 | 17-IC4 |
| EI-367271 | 79 |
| EI-367271 | 18-IC5 |
| EI-369608 | 61 |
| EI-369608 | 8-IC1 |
| EI-373214 | 62 |
| EI-373214 | 8-IC2 |
| EI-373215 | 63 |
| EI-373215 | 17-IC3 |
| EJ-337424 | 6-J102 |
| EJ-352118 | 21-3 |
| EJ-359031 | 82 |
| EJ-359031 | 6-TM1 |
| EJ-373203 | 83 |
| EJ-373203 | 12-TM101 |
| EJ-373207 | 6-J103 |
| EJ-373208 | 14-J160 |
| EJ-501350 | 6-J101 |
| EL-362308 | 11-IN2 |
| EM-361644 | 84 |
| EM-361644 | 11-IN1 |

# INDEX

| Part No. | Ref. No. |
|---|---|
| EO-318380 | 8-L3 |
| EO-325760 | 6-L101 |
| EO-337640 | 7-T1 |
| EO-337880 | 12-L101 |
| EO-338409 | 13-L150 |
| EO-342936 | 12-L102 |
| EO-345920 | 17-L1 |
| EO-345931 | 8-L4 |
| EO-349461 | 7-L1 |
| EO-349461 | 7-L3 |
| EO-349462 | 7-L2 |
| EO-349462 | 7-L4 |
| EO-349462 | 7-L5 |
| EO-349589 | 8-T1 |
| EO-352089 | 6-T5 |
| EO-353687 | 7-L7 |
| EO-356732 | 6-T1 |
| EO-356809 | 8-FL2 |
| EO-357050 | 8-L1 |
| EO-359056 | 7-L6 |
| EO-363279 | 6-T4 |
| EO-373196 | 6-T6 |
| EO-373197 | 6-T7 |
| EO-373247 | 8-L2 |
| EO-501338 | 6-T2 |
| EO-501339 | 6-T3 |
| ER-200926 | 85 |
| ER-200926 | 8-FR1 |
| ER-306805 | 6-R57 |
| ER-319455 | 86 |
| ER-319455 | 12-FR108 |
| ER-319455 | 12-FR109 |
| ER-321192 | 6-R83 |
| ER-321619 | 17-R12 |
| ER-322332 | 12-R134 |
| ER-324184 | 6-R13 |
| ER-324337 | 12-R133 |
| ER-333406 | 6-R23 |
| ER-337755 | 12-R103 |
| ER-341940 | 12-R135 |
| ER-341940 | 12-R136 |
| ER-351221 | 14-R160 |
| ER-356573 | 13-R150 |
| ER-367512 | 6-R35 |
| ES-349070 | 91 |
| ES-349070 | 19-SW901 |
| ES-349474 | 94 |
| ES-349474 | 17-TS1 |
| ES-349474 | 17-TS2 |
| ES-349474 | 17-TS3 |
| ES-349474 | 17-TS4 |
| ES-349474 | 17-TS5 |
| ES-349474 | 17-TS6 |
| ES-349474 | 17-TS7 |
| ES-349474 | 17-TS8 |
| ES-349474 | 17-TS9 |
| ES-349474 | 17-TS10 |
| ES-349474 | 17-TS11 |
| ES-349474 | 17-TS12 |
| ES-349474 | 17-TS13 |
| ES-349474 | 17-TS14 |
| ES-349474 | 17-TS15 |
| ES-349474 | 17-TS16 |
| ES-349474 | 17-TS17 |
| ES-361797 | 13-SW150 |
| ES-363292 | 92 |
| ES-363292 | 6-SW1 |
| ES-364176 | 90 |
| ES-364176 | 9-SW1 |
| ES-364176 | 9-SW2 |
| ES-366789 | 89 |
| ES-366789 | 2-SW1 |
| ES-366789 | 2-SW3 |
| ES-366789 | 2-SW4 |
| ES-501047 | 93 |
| ES-501047 | 10-SW1 |
| ES-717768 | 88 |
| ES-717768 | 4-86 |
| ES-720041 | 87 |
| ES-720041 | 3-85 |
| ES-720041 | 4-85 |
| ET-308977 | 105 |
| ET-308977 | 8-TR41 |
| ET-308977 | 8-TR42 |
| ET-310148 | 115 |
| ET-310148 | 8-TR35 |
| ET-310148 | 8-TR43 |
| ET-310148 | 8-TR52 |
| ET-328265 | 113 |
| ET-328265 | 6-TR4 |
| ET-328265 | 7-TR3 |
| ET-336869 | 97 |
| ET-336869 | 7-TR2 |
| ET-337759 | 99 |
| ET-337759 | 6-TR16 |
| ET-338324 | 114 |
| ET-338324 | 16-TR1 |
| ET-338410 | 106 |
| ET-338410 | 6-TR1 |
| ET-347143 | 104 |
| ET-347143 | 8-TR2 |
| ET-347143 | 8-TR3 |
| ET-349366 | 112 |
| ET-349366 | 8-TR33 |
| ET-349366 | 8-TR34 |
| ET-349366 | 8-TR44 |
| ET-349366 | 8-TR45 |
| ET-349449 | 98 |
| ET-349449 | 6-TR2 |
| ET-349449 | 7-TR1 |
| ET-349449 | 7-TR4 |
| ET-349592 | 111 |
| ET-349592 | 17-TR3 |
| ET-350795 | 110 |
| ET-350795 | 6-TR101 |
| ET-350795 | 6-TR102 |
| ET-350795 | 6-TR103 |
| ET-350795 | 8-TR6 |
| ET-350795 | 8-TR7 |
| ET-350795 | 8-TR15 |
| ET-350795 | 8-TR29 |
| ET-350795 | 8-TR30 |
| ET-350795 | 8-TR39 |
| ET-350795 | 8-TR47 |
| ET-350795 | 8-TR51 |
| ET-350795 | 8-TR55 |
| ET-350795 | 17-TR2 |
| ET-351872 | 109 |
| ET-351872 | 6-TR6 |
| ET-351872 | 6-TR8 |
| ET-351872 | 6-TR17 |
| ET-353899 | 100 |
| ET-353899 | 6-TR9 |
| ET-353899 | 6-TR10 |
| ET-353899 | 6-TR104 |
| ET-353899 | 6-TR105 |
| ET-353899 | 6-TR107 |
| ET-353899 | 8-TR50 |
| ET-353899 | 8-TR60 |
| ET-353899 | 11-TR1 |
| ET-355626 | 101 |
| ET-355626 | 8-TR4 |
| ET-360067 | 107 |
| ET-360067 | 6-TR106 |
| ET-360067 | 8-TR1 |
| ET-360067 | 8-TR5 |
| ET-360067 | 8-TR8 |
| ET-360067 | 8-TR10 |
| ET-360067 | 8-TR11 |
| ET-360067 | 8-TR12 |
| ET-360067 | 8-TR13 |
| ET-360067 | 8-TR16 |
| ET-360067 | 8-TR17 |
| ET-360067 | 8-TR18 |
| ET-360067 | 8-TR19 |
| ET-360067 | 8-TR20 |
| ET-360067 | 8-TR21 |
| ET-360067 | 8-TR22 |
| ET-360067 | 8-TR23 |
| ET-360067 | 8-TR24 |
| ET-360067 | 8-TR25 |
| ET-360067 | 8-TR26 |
| ET-360067 | 8-TR31 |
| ET-360067 | 8-TR32 |
| ET-360067 | 8-TR37 |
| ET-360067 | 8-TR38 |
| ET-360067 | 8-TR46 |
| ET-360067 | 8-TR53 |
| ET-360067 | 8-TR54 |
| ET-360067 | 12-TR102 |
| ET-360067 | 12-TR106 |
| ET-360137 | 108 |
| ET-360137 | 6-TR5 |
| ET-360137 | 6-TR7 |
| ET-360137 | 6-TR11 |
| ET-360137 | 6-TR12 |
| ET-360137 | 6-TR13 |
| ET-360137 | 6-TR14 |
| ET-360137 | 6-TR15 |
| ET-360137 | 6-TR18 |
| ET-360137 | 17-TR4 |
| ET-360137 | 17-TR5 |
| ET-360137 | 17-TR6 |
| ET-360137 | 17-TR7 |
| ET-360137 | 17-TR8 |
| ET-360399 | 96 |
| ET-360399 | 8-TR48 |
| ET-360399 | 8-TR49 |
| ET-363953 | 95 |
| ET-363953 | 8-TR9 |
| ET-363953 | 8-TR14 |
| ET-363953 | 8-TR27 |
| ET-363953 | 8-TR28 |
| ET-363953 | 8-TR36 |
| ET-363953 | 8-TR40 |
| ET-366365 | 102 |
| ET-366365 | 12-TR104A |
| ET-366581 | 12-TR103A |
| ET-366581 | 12-TR105 |
| ET-366677 | 12-TR101 |
| ET-366677 | 12-TR103B |
| ET-373210 | 103 |
| ET-373210 | 12-TR104B |
| EV-366674 | 116 |
| EV-366674 | 20-8 |
| EV-366676 | 117 |
| EV-366676 | 15-VR170 |
| EV-366768 | 118 |
| EV-366768 | 15-VR180 |
| EV-367499 | 6-VR1 |
| EV-367499 | 6-VR2 |
| EV-464253 | 8-VR6 |
| EV-464253 | 8-VR8 |
| EV-522404 | 8-VR5 |
| EV-522404 | 8-VR7 |
| EV-522663 | 8-VR1 |
| EV-522663 | 8-VR2 |
| EV-522663 | 8-VR4 |
| EV-572422 | 8-VR3 |
| EW-336923 | 19-4C |
| EW-347025 | 19-4E |
| EW-347898 | 19-4D |
| EW-367500 | 19-4B |
| EW-368470 | 19-4F |
| EW-374894 | 19-4A |
| EZ-366626 | 119 |
| EZ-366626 | 11-BT1 |
| EZ-371605 | 19-5 |
| HE-720049 | 4-90 |
| HP-720048 | 120 |
| HP-720048 | 4-89 |
| HP-720051 | 121 |
| HP-720051 | 3-89 |
| MB-500390 | 122 |
| MB-500390 | 2-6 |
| MB-720038 | 124 |
| MB-720038 | 3-51A |
| MB-720038 | 4-51A |
| MB-720039 | 123 |
| MB-720039 | 3-52 |
| MB-720039 | 4-52 |
| MB-720040 | 126 |
| MB-720040 | 3-53 |
| MB-720040 | 4-53 |
| MB-720042 | 125 |
| MB-720042 | 3-51B |
| MB-720042 | 4-51B |
| MC-500465 | 127 |
| MC-500465 | 20-6 |
| SA-349332 | 19-2 |
| SB-358882C-A | 20-13-B |
| SK-B362413A1 | 20-10-W |
| SK-B362413A2 | 20-10-B |
| SK-500406B | 2-5-B |
| SK-500406D | 2-5-W |
| SK-500409B | 20-12-B |
| SK-500409D | 20-12-W |
| SK-500412B | 20-14-B |
| SK-500412D | 20-14-W |
| SK-500415B | 20-15-B |
| SK-500415C | 20-15-W |
| SK-500417B | 20-11-B |
| SK-500417C | 20-11-W |
| SK-500423D | 20-13-W |
| SP-500371A | 19-6A |
| SP-500371B | 19-6B |
| SP-500371C | 19-6C |
| SP-500371D | 19-6D |
| SP-500371E | 19-6E |
| SP-500371F | 19-6F |
| SP-500371G | 19-6G |
| SP-500371H | 19-6H |
| SP-500371J | 19-6J |
| SP-500371K | 19-6K |
| SP-500371L | 19-6L |
| SP-500371M | 19-6M |
| SP-500371Y | 19-6Y |
| SP-500371Z | 19-6Z |
| SP-500372B | 20-17-B |
| SP-500372C | 20-17-W |
| SZ-362273 | 19-1 |
| ZG-336615 | 20-4 |
| ZG-500384 | 20-5 |
| ZG-500388 | 20-16 |
| ZS-201275 | 2-3 |
| ZS-308846 | 19-7 |
| ZS-308846 | 19-11 |
| ZS-308846 | 20-20 |
| ZS-314702 | 19-10 |
| ZS-322580 | 20-18 |
| ZS-323993 | 2-4 |
| ZS-331875 | 20-9 |
| ZS-336614 | 20-7 |
| ZS-351886 | 19-8 |
| ZS-447840 | 20-21 |
| ZS-460440 | 19-9 |
| ZS-498273 | 19-3 |
| ZS-498273 | 20-19 |

# INDEX

| Part No. | Ref. No. |
|---|---|
| AX-500546 | 1 |
| AX-500546 | 22-4 |
| BA-C1016A040C | 5-5 |
| BA-C1017A020A | 5-4A |
| BA-C1017A020B | 5-4B |
| BA-C1017A020C | 5-4C |
| BA-C1017A020D | 5-4D |
| BA-C1017A020E | 5-4E |
| BA-C1017A030A | 5-3A |
| BA-C1017A030B | 5-3B |
| BA-C1017A030C | 5-3C |
| BA-C1017A030D | 5-3D |
| BA-C1017A030E | 5-3E |
| BA-C1020A070A | 5-1A |
| BA-C1020A070B | 5-1B |
| BA-C1020A070C | 5-1C |
| BA-C1020A070D | 5-1D |
| BA-C1020A070E | 5-1E |
| BA-C1020A070F | 5-1F |
| BB-500471 | 2 |
| BB-500471 | 2-2 |
| BB-500472 | 3 |
| BB-500472 | 2-1 |
| BD-C1016A090F | 21-1A-B |
| BD-C1016A090G | 21-1B-B |
| BD-500410L | 21-2-B |
| BD-500410M | 21-3-B |
| BF-720036 | 4 |
| BF-720036 | 3-36 |
| BF-720036 | 4-36 |
| BM-720046 | 5 |
| BM-720046 | 3-91 |
| BM-720050 | 6 |
| BM-720050 | 4-91 |
| BR-720032 | 7 |
| BR-720032 | 3-34 |
| BR-720032 | 4-34 |
| BR-720034 | 8 |
| BR-720034 | 3-32 |
| BR-720034 | 4-32 |
| BT-500438 | 9 |
| BT-500438 | 20-T901A |
| BT-500439 | 10 |
| BT-500439 | 20-T901B |
| BT-500440 | 11 |
| BT-500440 | 20-T901C |
| BT-500441 | 12 |
| BT-500441 | 20-T901D |
| BT-500831 | 13 |
| BT-500831 | 20-T901E |
| BZ-720035 | 14 |
| BZ-720035 | 3-35 |
| BZ-720035 | 4-35 |
| BZ-720037 | 15 |
| BZ-720037 | 3-44 |
| BZ-720037 | 4-44 |
| EC-320548 | 13-C150 |
| EC-324662 | 12-C103 |
| EC-326583 | 12-C101 |
| EC-338411 | 13-C150A |
| EC-338496 | 13-C150B |
| EC-347255 | 8-C41 |
| EC-347263 | 8-C56 |
| EC-349631 | 8-C55 |
| EC-361665 | 12-C107 |
| EC-361665 | 12-C109 |
| EC-363329 | 6-VC1 |
| EC-363331 | 6-VC1A |
| EC-363331 | 6-VC2 |
| ED-301911 | 23 |
| ED-301911 | 6-D10 |
| ED-301911 | 11-D10 |
| ED-301911 | 11-D11 |
| ED-301911 | 12-D104 |
| ED-301911 | 12-D105 |
| ED-301911 | 12-D106 |
| ED-301911 | 12-D111 |
| ED-301911 | 17-D20 |
| ED-319167 | 28 |
| ED-319167 | 6-D11 |
| ED-321180 | 29 |
| ED-321180 | 6-D8 |
| ED-337267 | 27 |
| ED-337267 | 8-D11 |
| ED-344280 | 24 |
| ED-344280 | 6-D3 |
| ED-344280 | 6-D4 |
| ED-344280 | 6-D5 |
| ED-344280 | 6-D6 |
| ED-344280 | 6-D7 |
| ED-344280 | 6-D9 |
| ED-344280 | 6-D101 |
| ED-344280 | 6-D102 |
| ED-344280 | 6-D103 |
| ED-344280 | 6-D104 |
| ED-344280 | 6-D105 |
| ED-344280 | 6-D201 |
| ED-344280 | 8-D1 |
| ED-344280 | 8-D2 |
| ED-344280 | 8-D3 |
| ED-344280 | 8-D4 |
| ED-344280 | 8-D5 |
| ED-344280 | 8-D6 |
| ED-344280 | 8-D7 |
| ED-344280 | 8-D8 |
| ED-344280 | 8-D9 |
| ED-344280 | 8-D10 |
| ED-344280 | 8-D13 |
| ED-344280 | 8-D14 |
| ED-344280 | 8-D16 |
| ED-344280 | 8-D17 |
| ED-344280 | 8-D18 |
| ED-344280 | 8-D200 |
| ED-344280 | 11-D1 |
| ED-344280 | 11-D2 |
| ED-344280 | 11-D3 |
| ED-344280 | 11-D4 |
| ED-344280 | 11-D5 |
| ED-344280 | 11-D6 |
| ED-344280 | 11-D7 |
| ED-344280 | 11-D8 |
| ED-346538 | 30 |
| ED-346538 | 6-D106 |
| ED-346538 | 6-D107 |
| ED-346551 | 31 |
| ED-346551 | 8-D12 |
| ED-348200 | 20 |
| ED-348200 | 12-D102 |
| ED-349448 | 25 |
| ED-349448 | 7-D1 |
| ED-349448 | 7-D2 |
| ED-349448 | 7-D3 |
| ED-349448 | 7-D4 |
| ED-349460-A | 26 |
| ED-349460-A | 6-D1 |
| ED-349460-A | 6-D2 |
| ED-350748 | 21 |
| ED-350748 | 12-D101 |
| ED-355426 | 16 |
| ED-355426 | 9-D1 |
| ED-357754 | 22 |
| ED-357754 | 12-D103 |
| ED-360409 | 19 |
| ED-360409 | 18-D21 |
| ED-365107 | 18 |
| ED-365107 | 17-D12 |
| ED-365107 | 17-D13 |
| ED-365107 | 17-D14 |
| ED-365107 | 17-D15 |
| ED-367552 | 32 |
| ED-367552 | 12-D107 |
| ED-367552 | 12-D108 |
| ED-367552 | 12-D109 |
| ED-367552 | 12-D110 |
| ED-373169 | 17 |
| ED-373169 | 17-D16 |
| ED-373169 | 17-D17 |
| ED-373169 | 17-D18 |
| ED-373169 | 17-D19 |
| EE-F0131E010A | 33 |
| EE-F0131E010A | 5-2A |
| EE-F0141E010B | 34 |
| EE-F0141E010B | 5-2B |
| EE-315329 | 22-2 |
| EE-373213 | 22-1 |
| EF-249851 | 42 |
| EF-249851 | 12-F3C |
| EF-249851 | 12-F4C |
| EF-249851 | 12-F6C |
| EF-249851 | 12-F7C |
| EF-306950 | 35 |
| EF-306950 | 13-F1A |
| EF-306950 | 13-F2A |
| EF-306952 | 36 |
| EF-306952 | 12-F6A |
| EF-306952 | 12-F7A |
| EF-306957 | 39 |
| EF-306957 | 12-F6B |
| EF-306957 | 12-F7B |
| EF-308847 | 37 |
| EF-308847 | 12-F5B |
| EF-323080 | 38 |
| EF-323080 | 13-F1B |
| EF-346115 | 40 |
| EF-346115 | 12-F3B |
| EF-346115 | 12-F4B |
| EF-355399 | 44 |
| EF-355399 | 12-F3D |
| EF-355399 | 12-F4D |
| EF-355399 | 12-F6D |
| EF-355399 | 12-F7D |
| EF-364518 | 43 |
| EF-364518 | 12-F5D |
| EF-364518 | 13-F1D |
| EF-623125 | 41 |
| EF-623125 | 12-F5C |
| EF-623125 | 13-F1C |
| EH-336776 | 48 |
| EH-336776 | 8-FL1 |
| EH-336776 | 8-FL3 |
| EH-338338 | 47 |
| EH-338338 | 6-FL1A |
| EH-344434 | 45 |
| EH-344434 | 6-FL3 |
| EH-355568 | 46 |
| EH-355568 | 6-FL1 |
| EH-355568 | 6-FL2 |
| EH-360924 | 49 |
| EH-360924 | 6-FL7 |
| EH-501321 | 50 |
| EH-501321 | 6-FL4 |
| EH-501321 | 6-FL5 |
| EH-501323 | 51 |
| EH-501323 | 6-FL6 |
| EI-304657 | 64 |
| EI-304657 | 8-IC4 |
| EI-304657 | 8-IC5 |
| EI-304657 | 8-IC6 |
| EI-332259 | 65 |
| EI-332259 | 6-IC102 |
| EI-332259 | 6-IC301 |
| EI-337017 | 70 |
| EI-337017 | 17-X2 |
| EI-344422 | 71 |
| EI-344422 | 11-X1 |
| EI-344764 | 61 |
| EI-344764 | 6-IC101 |
| EI-345551 | 56 |
| EI-345551 | 17-IC2 |
| EI-346071 | 59 |
| EI-346071 | 8-IC3 |
| EI-349719 | 60 |
| EI-349719 | 6-IC103 |
| EI-349719 | 6-IC202 |
| EI-351569 | 57 |
| EI-351569 | 8-IC7 |
| EI-351966 | 67 |
| EI-351966 | 6-IC201 |
| EI-359053 | 55 |
| EI-359053 | 16-IC1 |
| EI-359683 | 63 |
| EI-359683 | 6-IC2 |
| EI-361624 | 54 |
| EI-361624 | 6-IC1 |
| EI-363289 | 66 |
| EI-363289 | 6-IC3 |
| EI-363290 | 68 |
| EI-363290 | 11-IC1 |
| EI-366695 | 62 |
| EI-366695 | 12-IC101 |
| EI-366767 | 58 |
| EI-366767 | 17-IC4 |
| EI-367271 | 69 |
| EI-367271 | 18-IC5 |
| EI-369608 | 52 |
| EI-369608 | 8-IC1 |
| EI-373214 | 53 |
| EI-373214 | 8-IC2 |
| EJ-352118 | 22-3 |
| EJ-359031 | 72 |
| EJ-359031 | 6-TM1 |
| EJ-373203 | 73 |
| EJ-373203 | 12-TM101 |
| EJ-373207 | 6-J103 |
| EJ-373208 | 14-J160 |
| EJ-501350 | 6-J101 |
| EL-362308 | 11-IN2 |
| EM-361644 | 74 |
| EM-361644 | 11-IN1 |
| EO-318380 | 8-L3 |
| EO-325760 | 6-L101 |
| EO-337640 | 7-T1 |
| EO-337880 | 12-L101 |
| EO-338409 | 13-L150 |
| EO-342936 | 12-L102 |
| EO-345920 | 17-L1 |
| EO-345931 | 8-L4 |
| EO-349461 | 7-L1 |
| EO-349461 | 7-L3 |
| EO-349462 | 7-L2 |
| EO-349462 | 7-L4 |
| EO-349462 | 7-L5 |
| EO-349589 | 8-T1 |
| EO-352089 | 6-T5 |
| EO-353687 | 7-L7 |
| EO-356732 | 6-T1 |
| EO-356809 | 8-FL2 |
| EO-357050 | 8-L1 |
| EO-359056 | 7-L6 |
| EO-363279 | 6-T4 |
| EO-373196 | 6-T6 |
| EO-373197 | 6-T7 |
| EO-373247 | 8-L2 |
| EO-501338 | 6-T2 |
| EO-501339 | 6-T3 |
| ER-200926 | 8-FR1 |
| ER-306805 | 6-R57 |
| ER-319455 | 76 |
| ER-319455 | 12-FR108 |
| ER-319455 | 12-FR109 |
| ER-321192 | 6-R83 |
| ER-321619 | 17-R12 |
| ER-322332 | 12-R134 |
| ER-324184 | 6-R13 |
| ER-324337 | 12-R133 |
| ER-333406 | 6-R23 |
| ER-337755 | 12-R103 |
| ER-341940 | 12-R135 |
| ER-341940 | 12-R136 |
| ER-351221 | 14-R160 |
| ER-356573 | 13-R150 |
| ER-367512 | 6-R35 |
| ES-349070 | 82 |
| ES-349070 | 20-SW901 |
| ES-349474 | 85 |
| ES-349474 | 17-TS1 |
| ES-349474 | 17-TS2 |
| ES-349474 | 17-TS3 |
| ES-349474 | 17-TS4 |
| ES-349474 | 17-TS5 |

# INDEX

| Part No. | Ref. No. |
|---|---|
| ES-349474 | 17-TS6 |
| ES-349474 | 17-TS7 |
| ES-349474 | 17-TS8 |
| ES-349474 | 17-TS10 |
| ES-349474 | 17-TS11 |
| ES-349474 | 17-TS12 |
| ES-349474 | 17-TS13 |
| ES-349474 | 17-TS14 |
| ES-349474 | 17-TS15 |
| ES-349474 | 17-TS16 |
| ES-349474 | 17-TS17 |
| ES-349474 | 19-TS9 |
| ES-361797 | 81 |
| ES-361797 | 13-SW150 |
| ES-363292 | 83 |
| ES-363292 | 6-SW1 |
| ES-364176 | 80 |
| ES-364176 | 9-SW1 |
| ES-364176 | 9-SW2 |
| ES-366789 | 79 |
| ES-366789 | 2-SW1 |
| ES-366789 | 2-SW3 |
| ES-366789 | 2-SW4 |
| ES-501047 | 84 |
| ES-501047 | 10-SW1 |
| ES-717768 | 78 |
| ES-717768 | 4-86 |
| ES-720041 | 77 |
| ES-720041 | 3-85 |
| ES-720041 | 4-85 |
| ET-308977 | 95 |
| ET-308977 | 8-TR41 |
| ET-308977 | 8-TR42 |
| ET-310148 | 105 |
| ET-310148 | 8-TR35 |
| ET-310148 | 8-TR43 |
| ET-310148 | 8-TR52 |
| ET-328265 | 103 |
| ET-328265 | 6-TR4 |
| ET-328265 | 7-TR3 |
| ET-336869 | 88 |
| ET-336869 | 7-TR2 |
| ET-337759 | 90 |
| ET-337759 | 6-TR16 |
| ET-338324 | 104 |
| ET-338324 | 16-TR1 |
| ET-338410 | 96 |
| ET-338410 | 6-TR1 |
| ET-347143 | 94 |
| ET-347143 | 8-TR2 |
| ET-347143 | 8-TR3 |
| ET-349366 | 102 |
| ET-349366 | 8-TR33 |
| ET-349366 | 8-TR34 |
| ET-349366 | 8-TR44 |
| ET-349366 | 8-TR45 |
| ET-349449 | 89 |
| ET-349449 | 6-TR2 |
| ET-349449 | 7-TR1 |
| ET-349449 | 7-TR4 |
| ET-349592 | 101 |
| ET-349592 | 17-TR3 |
| ET-350795 | 100 |
| ET-350795 | 6-TR101 |
| ET-350795 | 6-TR102 |
| ET-350795 | 6-TR103 |
| ET-350795 | 8-TR6 |
| ET-350795 | 8-TR7 |
| ET-350795 | 8-TR15 |
| ET-350795 | 8-TR29 |
| ET-350795 | 8-TR30 |
| ET-350795 | 8-TR39 |
| ET-350795 | 8-TR47 |
| ET-350795 | 8-TR51 |
| ET-350795 | 8-TR55 |
| ET-350795 | 17-TR2 |
| ET-351872 | 99 |
| ET-351872 | 6-TR6 |
| ET-351872 | 6-TR8 |
| ET-351872 | 6-TR17 |
| ET-353899 | 91 |
| ET-353899 | 6-TR9 |
| ET-353899 | 6-TR10 |
| ET-353899 | 6-TR104 |
| ET-353899 | 6-TR105 |
| ET-353899 | 6-TR107 |
| ET-353899 | 8-TR50 |
| ET-353899 | 8-TR60 |
| ET-353899 | 11-TR1 |
| ET-355626 | 92 |
| ET-355626 | 8-TR4 |
| ET-360067 | 97 |
| ET-360067 | 6-TR106 |
| ET-360067 | 8-TR1 |
| ET-360067 | 8-TR5 |
| ET-360067 | 8-TR8 |
| ET-360067 | 8-TR10 |
| ET-360067 | 8-TR11 |
| ET-360067 | 8-TR12 |
| ET-360067 | 8-TR13 |
| ET-360067 | 8-TR16 |
| ET-360067 | 8-TR17 |
| ET-360067 | 8-TR18 |
| ET-360067 | 8-TR19 |
| ET-360067 | 8-TR20 |
| ET-360067 | 8-TR21 |
| ET-360067 | 8-TR22 |
| ET-360067 | 8-TR23 |
| ET-360067 | 8-TR24 |
| ET-360067 | 8-TR25 |
| ET-360067 | 8-TR26 |
| ET-360067 | 8-TR31 |
| ET-360067 | 8-TR32 |
| ET-360067 | 8-TR37 |
| ET-360067 | 8-TR38 |
| ET-360067 | 8-TR46 |
| ET-360067 | 8-TR53 |
| ET-360067 | 8-TR54 |
| ET-360067 | 12-TR102 |
| ET-360067 | 12-TR106 |
| ET-360137 | 98 |
| ET-360137 | 6-TR5 |
| ET-360137 | 6-TR7 |
| ET-360137 | 6-TR11 |
| ET-360137 | 6-TR12 |
| ET-360137 | 6-TR13 |
| ET-360137 | 6-TR14 |
| ET-360137 | 6-TR15 |
| ET-360137 | 6-TR18 |
| ET-360137 | 17-TR4 |
| ET-360137 | 17-TR5 |
| ET-360137 | 17-TR6 |
| ET-360137 | 17-TR7 |
| ET-360137 | 17-TR8 |
| ET-360399 | 87 |
| ET-360399 | 8-TR48 |
| ET-360399 | 8-TR49 |
| ET-363953 | 86 |
| ET-363953 | 8-TR9 |
| ET-363953 | 8-TR14 |
| ET-363953 | 8-TR27 |
| ET-363953 | 8-TR28 |
| ET-363953 | 8-TR36 |
| ET-363953 | 8-TR40 |
| ET-366581 | 12-TR105 |
| ET-366677 | 12-TR101 |
| ET-366677 | 12-TR103 |
| ET-373210 | 93 |
| ET-373210 | 12-TR104 |
| EV-366674 | 106 |
| EV-366674 | 21-8 |
| EV-366768 | 107 |
| EV-366768 | 15-VR180 |
| EV-367499 | 6-VR1 |
| EV-367499 | 6-VR2 |
| EV-464253 | 8-VR6 |
| EV-464253 | 8-VR8 |
| EV-522404 | 8-VR5 |
| EV-522404 | 8-VR7 |
| EV-522663 | 8-VR1 |
| EV-522663 | 8-VR2 |
| EV-522663 | 8-VR4 |
| EV-572422 | 8-VR3 |
| EW-347025 | 20-4E |
| EW-347897 | 20-4C |
| EW-347898 | 20-4D |
| EW-367500 | 20-4B |
| EW-368470 | 20-4F |
| EW-374894 | 20-4A |
| EZ-366626 | 108 |
| EZ-366626 | 11-BT1 |
| EZ-371605 | 20-5 |
| HE-720049 | 109 |
| HE-720049 | 4-90 |
| HP-720048 | 110 |
| HP-720048 | 4-89 |
| HP-720051 | 111 |
| HP-720051 | 3-89 |
| MB-500390 | 112 |
| MB-500390 | 2-6 |
| MB-720039 | 113 |
| MB-720039 | 3-52 |
| MB-720039 | 4-52 |
| MB-720040 | 115 |
| MB-720040 | 3-53 |
| MB-720040 | 4-53 |
| MB-720042 | 114 |
| MB-720042 | 3-51 |
| MB-720042 | 4-51 |
| MC-500465 | 116 |
| MC-500465 | 21-6 |
| SA-349332 | 20-2 |
| SB-358882C-A | 21-13-B |
| SK-500363B | 21-11-B |
| SK-500364B | 21-10-B |
| SK-500406B | 2-5-B |
| SK-500409B | 21-12-B |
| SK-500412B | 21-14-B |
| SP-500353A | 20-6A |
| SP-500353B | 20-6B |
| SP-500353C | 20-6C |
| SP-500353D | 20-6D |
| SP-500353E | 20-6E |
| SP-500353F | 20-6F |
| SP-500353J | 20-6G |
| SP-500355B | 21-15-B |
| SZ-362273 | 20-1 |
| ZG-336615 | 21-4 |
| ZG-500384 | 21-5 |
| ZS-201275 | 2-3 |
| ZS-308846 | 20-7 |
| ZS-308846 | 20-11 |
| ZS-308846 | 21-18 |
| ZS-314702 | 20-10 |
| ZS-322580 | 21-16 |
| ZS-323993 | 2-4 |
| ZS-331875 | 21-9 |
| ZS-336614 | 21-7 |
| ZS-351886 | 20-8 |
| ZS-447840 | 21-19 |
| ZS-460440 | 20-9 |
| ZS-498273 | 20-3 |
| ZS-498273 | 21-17 |

## ABBREVIATIONS FOR SERVICE MANUAL (CASSETTE)

| Abbreviation | Explanation | Abbreviation | Explanation |
|---|---|---|---|
| AC | Alternating Current | MIN | MINute |
| A/D | Analog/Digital | MML | Maximum Modulation Level |
| AF | Auto Fader | MOL | Maximum Output Level |
| AMP | AMPlifier | MPX | Multi PleX |
| AR | Anti Recording | NC | Not Connected (No Connection) |
| AT BIAS | Auto Tuning BIAS | NFB | Negative Feed Back |
| ATT | ATTenuator | NORM | NORMal |
| BAL | BALance | NR | Noise Reduction |
| BEF | Band Elimination Filter | OSC | OSCillator (OSCillation) |
| BSS | Blank Search System | P | Pulse |
| CAP M | CAPsTan Motor | PB | Play Back |
| CH | CHannel | QMSS | Quick Memory Search System |
| COMP | COMParator | QR | Quick Reverse |
| CONT | CONTinuance | R CH | Right CHannel |
| CRLP | Computer Recording Level Processing | REC | RECord (RECording) |
| CS | Chip Select | REV | REVerse |
| D/A | Digital/Analog | ROT | ROTation |
| DC | Direct Current | REW | REWind |
| DET | DETector | SEC | SECond |
| DISCRI | DISCRIminator | SELE | SELEctor |
| DUB | DUBbing | SENS | SENSitivity |
| EQ | EQualizer | SEPP | Single Ended Push Pull |
| FF (or F. FWD) | Fast Forward | SIG | SIGnal |
| FLD | FLuorescent Display | SPECT | SPECTrum |
| FREQ | FREQuency | STD | STanDard |
| FWD | ForWarD | SW | SWitch |
| GND | GrouND | SYSCON | SYStem CONtrol |
| H | High | TP | Test Point |
| HPF | High Pass Filter | TRIG | TRIGa |
| IND | INDicator | VCA | Voltage Control Attenuator |
| IPLS | Instant Program Location System | VOL | VOLume |
| L | Low | VOLT | VOLTage |
| L CH | Left CHannel | VR | Variable Resistor |
| LED | Light Emitining Diode | X'TAL | cysTAL |
| MEMO | MEMOry | X1 | Normal speed |
| MICOM | MIcroCOMputer | X2 | Dubble speed |

## ABBREVIATIONS FOR SERVICE MANUAL(TUNER)

| ABBREVIATION | EXPLANATION | ABBREVIATION | EXPLANATION |
|---|---|---|---|
| AFC | Auto Frequency Control | MEMO | MEMOry |
| AGC | Auto Gain Control | MI-COM | MIcro-COMputer |
| ALC | Auto Level Control | MIN | MINimum |
| AM | Amplitude Modulation | MIX | MIXing |
| AMP | AMPlifier | MPX | Multi pleX |
| ANT | ANTenna | MW | Medium Wave (frequency) |
| BATT | BATTery | NC | No Connection |
| BLK | BLocK | NFB | Negative Feed Back |
| BUFF | BUFFer | OSC | OSCillator |
| COMP | COMPalator | PCB | Printed Circuit Board |
| DET | DETect (DETctor) | PLL | Phase Locked Loop |
| FLD |  | Q.D | Quadrature Detector |
| FM | Frequency Modulation | Rch | Right channel |
| FREQ | FREQuency | REF | REFerence |
| GND | GrouND | REG | REGulator |
| H | High | RF | Radio Frequency |
| HPF | High Pass Filter | SEG | SEGment |
| IF | Intermediate Frequency | SELE | SELEctor |
| IHF | Institut of High Fidelity | SENS | SENSitivity |
| IND | INDicator | SIG | SIGnal |
| I/O | In/Out | S/N | Signal to Noise Ratio |
| JW | Jumper Wire | SSG | Standard Signal Generator |
| L | Low | STD | STanDard |
| LCD | Liquid Crystal Display | SW | SWitch: Short Wave (frequency) |
| Lch | Left channel | THD | Total Harmonic Distortion |
| LED | Light Emiting Diode | TP | Test Point |
| LPF | Low Pass Filter | VCO | Voltage Controlled Oscillator |
| LW | Long Wave (Frequency) | VR | Variable Resistor |
|  |  | X'TAL | Crystal |

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# AKAI

MIDI COMPONENT SYSTEM

## MODEL AC-M312/L
## MODEL AC-M512/L

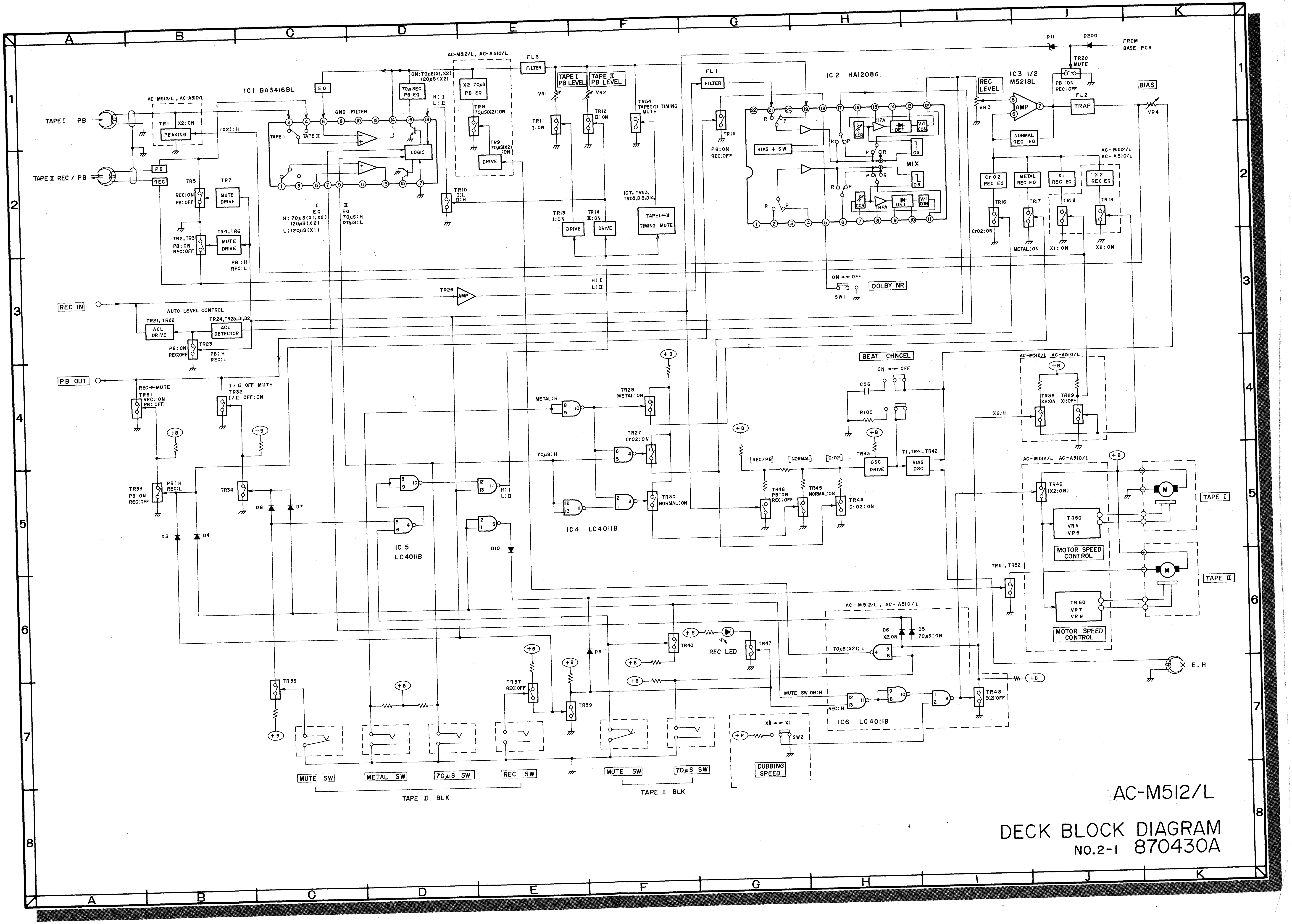
COMPONENT

## MODEL AC-A510/L

# SCHEMATIC DIAGRAM AND PC BOARDS

## TABLE OF CONTENTS

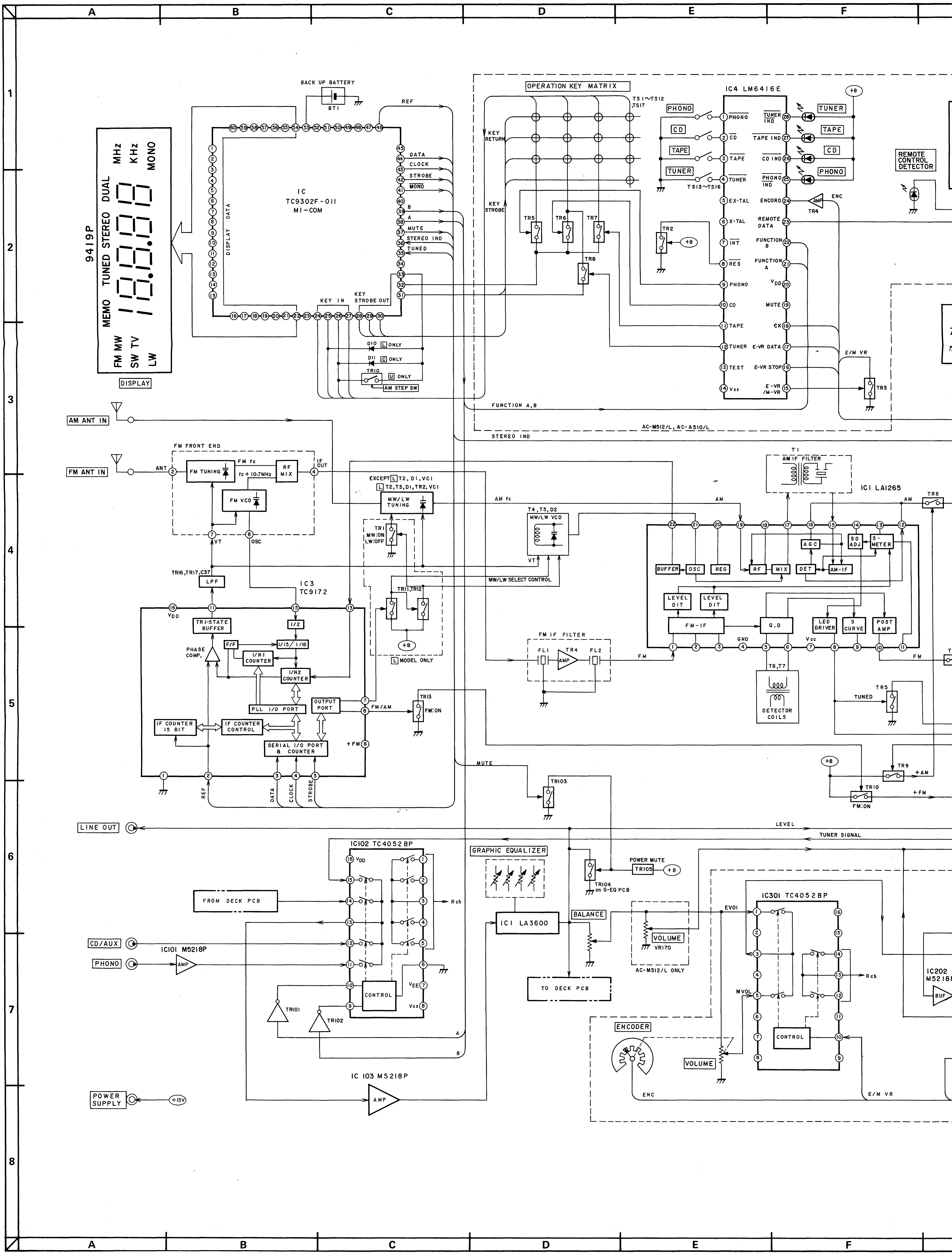
1. DECK BLOCK DIAGRAM .......... 2
2. AMP SECTION BLOCK DIAGRAM .......... 3
3. CONNECTION DIAGRAM .......... 4
4. G-EQ PC BOAD AND OTHER PC BOARDS .......... 5
5. MAIN SCHEMATIC DIAGRAM .......... 6
6. MAIN PC BOARD, POWER SW PC BOARD AND HEAD PHONE PC BOARD .......... 7
7. BASE SCHEMATIC DIAGRAM .......... 8
8. BASE PC BOARD .......... 9
9. DECK SCHEMATIC DIAGRAM .......... 10
10. DECK PC BOARD .......... 11
11. CONTROL AND LCD SCHEMATIC DIAGRAM .......... 12
12. CONTROL PC BOARD AND LCD PC BOARD .......... 13
13. FRONT END AND RC-S500 REMOTE CONTROL SCHEMATIC DIAGRAM .......... 14

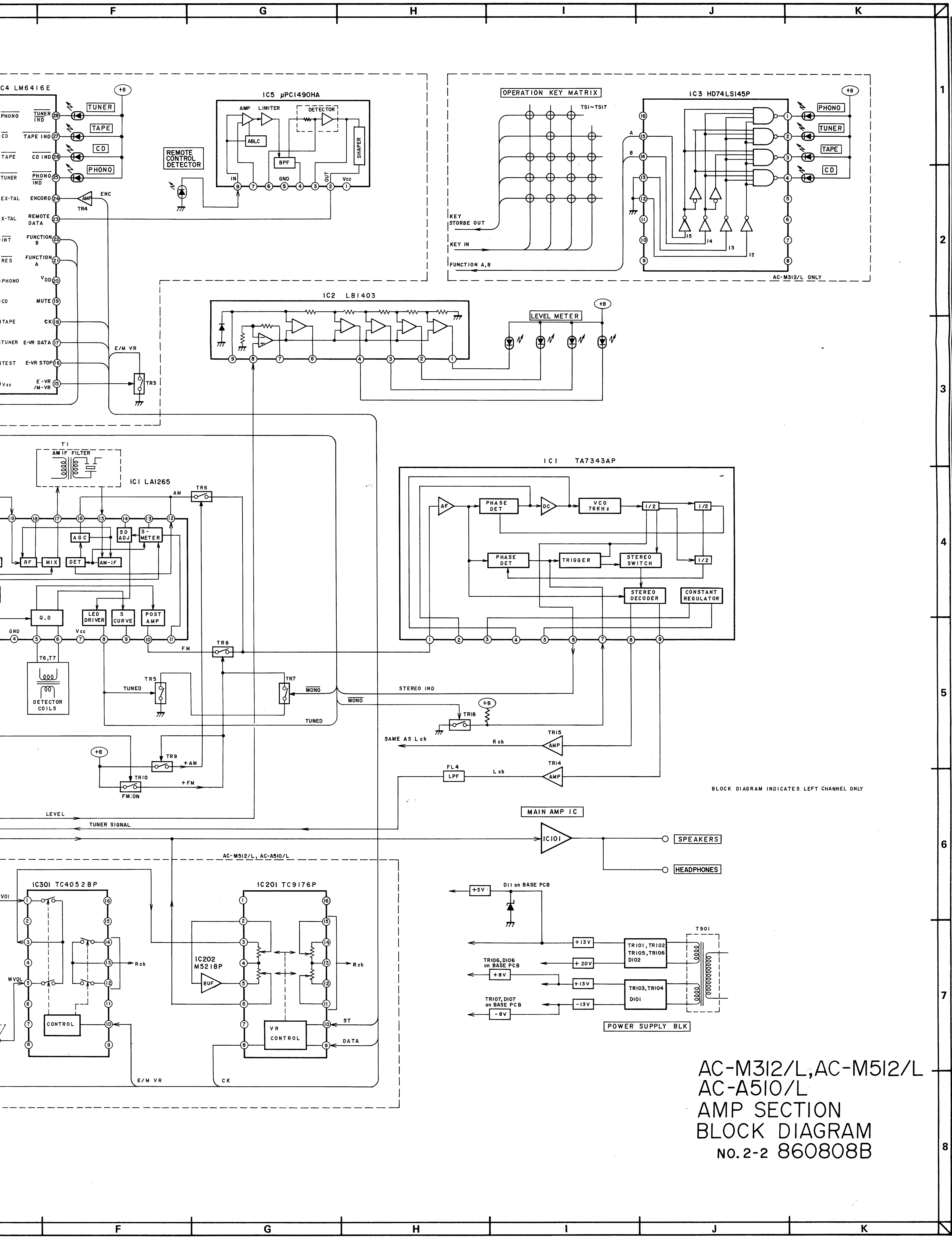

TAPE I PB
TAPE II REC / PB
AC-M512/L , AC-A510/L
TR1
PEAKING
X2: ON
(X2): H
PB
REC
TR5
REC: ON
PB: OFF
TR7
MUTE DRIVE
TR2, TR3
PB: ON
REC: OFF
TR4, TR6
MUTE DRIVE
PB: H
REC: L
IC1 BA3416BL
EQ
GND
FILTER
TAPE I
TAPE II
LOGIC
I EQ H: 70μS(X1, X2) 120μS(X2) L: 120μS(X1)
II EQ 70μS: H 120μS: L
ON: 70μS(X1, X2) 120μS(X2)
70μSEC PB EQ
H: I
L: II
X2 70μS PB EQ
TR8 70μS(X2): ON
TR9 70μS(X2): ON
DRIVE
TR10 I: L II: H
FL3
FILTER
TAPE I PB LEVEL
TAPE II PB LEVEL
VR1
VR2
TR11 I: ON
TR12 II: ON
TR54 TAPEI/II TIMING MUTE
TR13 I: ON
TR14 II: ON
DRIVE
IC7, TR53, TR55, D13, D14
TAPEI↔II TIMING MUTE
H: I
L: II
FL1
FILTER
TR15
PB: ON
REC: OFF
IC2 HA12086
BIAS ÷ SW
HPA
DET
V/I CON
CCR
OS
MIX
ON ↔ OFF
SW1
DOLBY NR
REC LEVEL
VR3
IC3 1/2 M5218L
AMP
NORMAL REC EQ
TR20 MUTE
PB: ON
REC: OFF
D11
D200
FROM BASE PCB
FL2
TRAP
BIAS
VR4
Cr02 REC EQ
METAL REC EQ
X1 REC EQ
X2 REC EQ
TR16
TR17
TR18
TR19
Cr02: ON
METAL: ON
X1: ON
X2: ON
REC IN
TR26
AMP
AUTO LEVEL CONTROL
TR21, TR22
ACL DRIVE
TR24, TR25, D1, D2
ACL DETECTOR
TR23
PB: ON
REC: OFF
PB: H
REC: L
PB OUT
REC→MUTE
TR31
REC: ON
PB: OFF
I/II OFF MUTE
TR32
I/II OFF: ON
+B
TR33
PB: ON
REC: OFF
PB: H
REC: L
TR34
D3
D4
D8
D7
IC5 LC4011B
METAL: H
TR28 METAL: ON
TR27 Cr02: ON
70μS: H
TR30 NORMAL: ON
IC4 LC4011B
H: I
L: II
D10
BEAT CHNCEL
ON ↔ OFF
C56
R100
[REC/PB]
[NORMAL]
[Cr02]
TR43
OSC DRIVE
T1, TR41, TR42
BIAS OSC
TR46 PB: ON REC: OFF
TR45 NORMAL: ON
TR44 Cr02: ON
AC-M512/L AC-A510/L
TR38 X2: ON
TR29 X1: OFF
X2: H
TR49 (X2: ON)
TR50 VR5 VR6
MOTOR SPEED CONTROL
TAPE I
TR51, TR52
TR60 VR7 VR8
MOTOR SPEED CONTROL
TAPE II
M
D6 X2: ON
D5 70μS: ON
70μS(X2): L
TR40
REC LED
TR47
D9
TR36
TR37 REC: OFF
TR39
MUTE SW ON: H
REC: H
IC6 LC4011B
TR48 (X2): OFF
E. H
X2 ↔ X1
SW2
DUBBING SPEED
MUTE SW
METAL SW
70μS SW
REC SW
TAPE II BLK
MUTE SW
70μS SW
TAPE I BLK
A B C D E F G H I J K
1 2 3 4 5 6 7 8

AC-M512/L

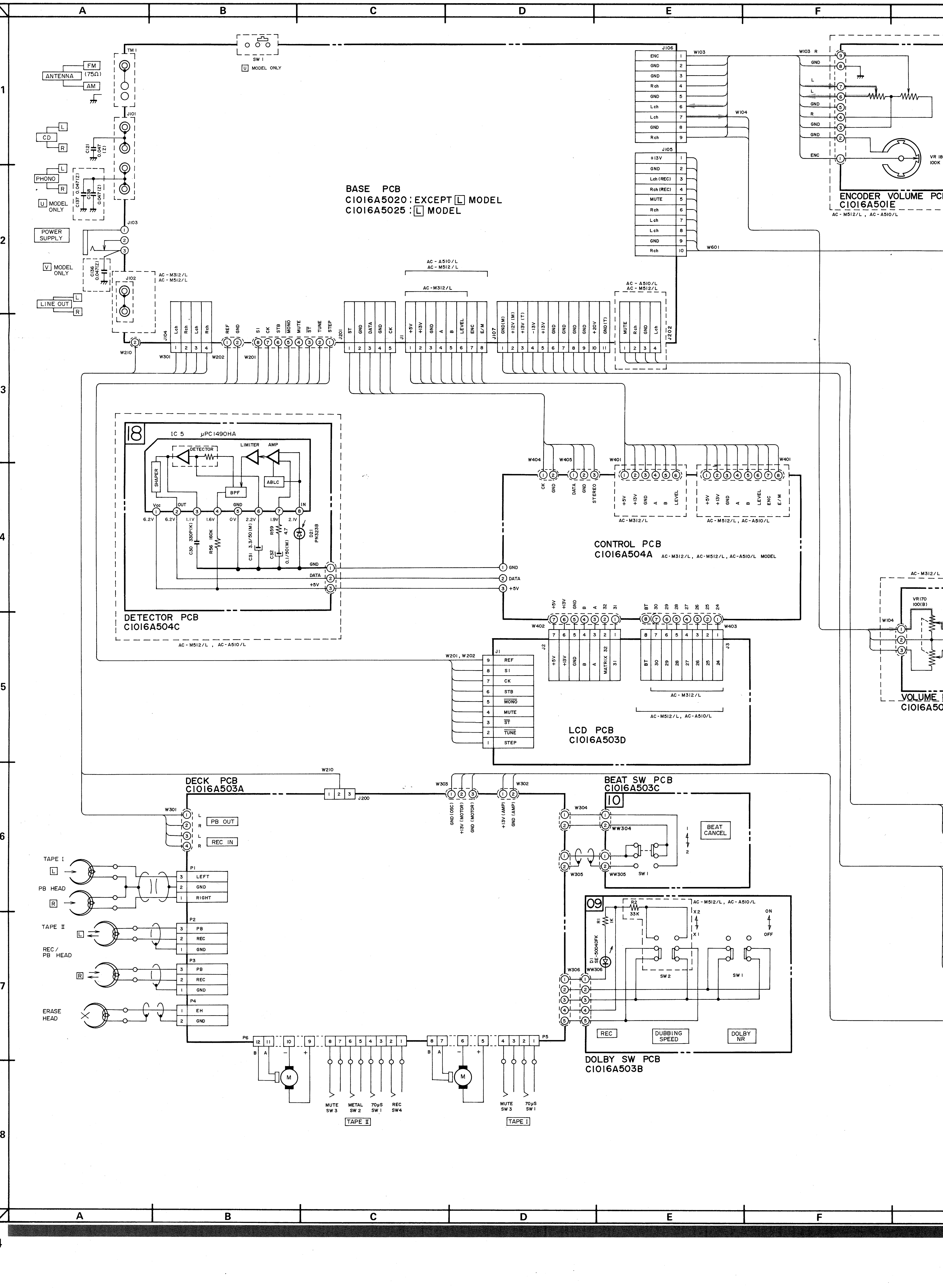
DECK BLOCK DIAGRAM

NO.2-1 870430A

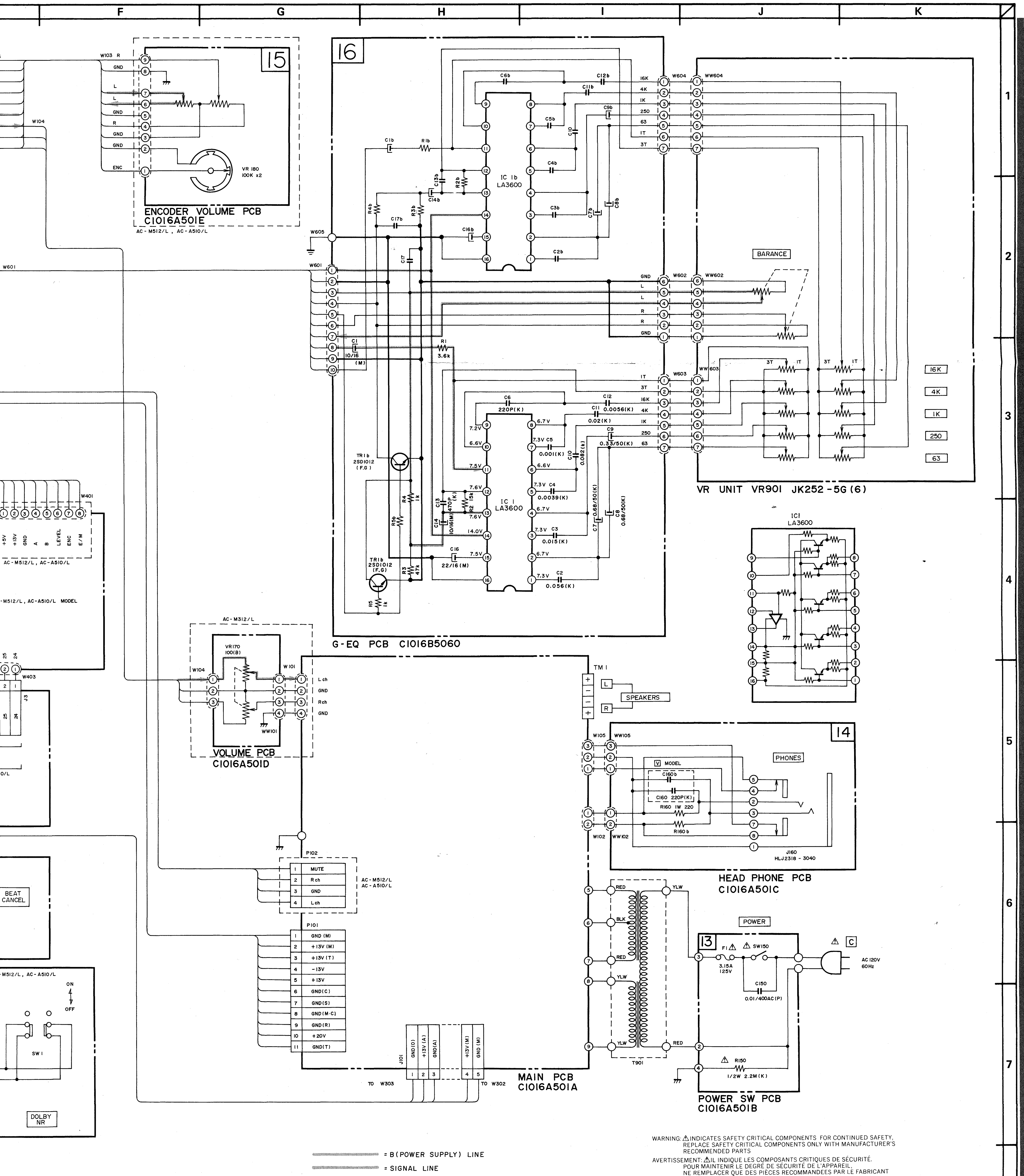

A
B
C
D
E
F
1
2
3
4
5
6
7
8
BACK UP BATTERY
BT1
REF
IC
TC9302F-011
MI-COM
DISPLAY DATA
DATA
CLOCK
STROBE
MONO
B
A
MUTE
STEREO IND
TUNED
KEY IN
KEY STROBE OUT
D10 L ONLY
D11 C ONLY
TR10
U ONLY
AM STEP SW
9419P
MEMO TUNED STEREO DUAL MHz KHz MONO
FM MW SW TV LW
DISPLAY
OPERATION KEY MATRIX
TS1~TS12, TS17
KEY RETURN
KEY STROBE
TR5
TR6
TR7
TR8
TR2
+B
IC4 LM6416E
PHONO
CD
TAPE
TUNER
TS13~TS16
EX-TAL
X-TAL
INT
RES
TEST
Vss
TUNER IND
TAPE IND
CD IND
PHONO IND
ENCORD
REMOTE DATA
FUNCTION B
FUNCTION A
VDD
MUTE
CK
E-VR DATA
E-VR STOP
E-VR /M-VR
AMP
TR4
ENC
REMOTE CONTROL DETECTOR
E/M VR
TR3
FUNCTION A,B
AC-M512/L, AC-A510/L
STEREO IND
AM ANT IN
FM ANT IN
FM FRONT END
ANT
FM TUNING
FM fc
RF MIX
fc+10.7MHz
FM VCO
IF OUT
VT
OSC
TR16, TR17, C37
LPF
IC3
TC9172
VDD
TRI-STATE BUFFER
1/2
F/F
1/15/1/16
PHASE COMP.
1/N1 COUNTER
1/N2 COUNTER
PLL I/O PORT
OUTPUT PORT
IF COUNTER 15 BIT
IF COUNTER CONTROL
SERIAL I/O PORT & COUNTER
+FM
FM/AM
TR13
FM:ON
REF
DATA
CLOCK
STROBE
EXCEPT L T2, D1, VC1
L T2, T3, D1, TR2, VC1
MW/LW TUNING
TR1
MW:ON LW:OFF
TR11, TR12
L MODEL ONLY
AM fc
T4, T5, D2
MW/LW VCO
MW/LW SELECT CONTROL
FM IF FILTER
FL1
TR4
FL2
FM
T1
AM IF FILTER
IC1 LA1265
AM
TR6
BUFFER
OSC
REG
RF
MIX
DET
AGC
SD ADJ
S-METER
AM-IF
LEVEL DIT
FM-IF
Q.D
LED DRIVER
S CURVE
POST AMP
GND
Vcc
T6, T7
DETECTOR COILS
TR5
TUNED
MUTE
TR103
TR9
+AM
TR10
+FM
FM:ON
LINE OUT
LEVEL
TUNER SIGNAL
IC102 TC4052BP
VDD
VEE
Vss
CONTROL
Rch
FROM DECK PCB
CD/AUX
PHONO
IC101 M5218P
AMP
TR101
TR102
GRAPHIC EQUALIZER
TR104 on G-EQ PCB
POWER MUTE
TR105
IC1 LA3600
BALANCE
VOLUME
VR170
AC-M312/L ONLY
TO DECK PCB
EV01
IC301 TC4052BP
MVOL
CONTROL
ENCODER
VOLUME
ENC
E/M VR
IC202 M5218
BUF
IC 103 M5218P
POWER SUPPLY
+13V


F
G
H
I
J
K
1
2
3
4
5
6
7
8
IC4 LM6416E
+B
TUNER
TAPE
CD
PHONO
TUNER IND
TAPE IND
CD IND
PHONO IND
ENCORD
REMOTE DATA
FUNCTION B
FUNCTION A
VDD
MUTE
CK
E-VR DATA
E-VR STOP
E-VR /M-VR
EX-TAL
X-TAL
INT
RES
TEST
Vss
ENC
AMP
TR4
E/M VR
TR3
IC5 μPC1490HA
AMP
LIMITER
DETECTOR
ABLC
BPF
SHAPER
IN
GND
OUT
Vcc
REMOTE CONTROL DETECTOR
OPERATION KEY MATRIX
TS1~TS17
KEY STORBE OUT
KEY IN
FUNCTION A, B
IC3 HD74LS145P
A
B
PHONO
TUNER
TAPE
CD
AC-M312/L ONLY
IC2 LB1403
LEVEL METER
T1
AM IF FILTER
IC1 LA1265
AM
TR6
RF
MIX
DET
AM-IF
AGC
SD ADJ
S-METER
Q.D
LED DRIVER
S CURVE
POST AMP
GND
Vcc
T6, T7
DETECTOR COILS
TR8
FM
TR5
TUNED
TR7
MONO
STEREO IND
TR18
TR9
+AM
TR10
FM:ON
+FM
LEVEL
TUNER SIGNAL
IC1 TA7343AP
AF
PHASE DET
DC
VCO 76KHz
1/2
TRIGGER
STEREO SWITCH
STEREO DECODER
CONSTANT REGULATOR
SAME AS L ch
R ch
TR15
L ch
TR14
FL4
LPF
BLOCK DIAGRAM INDICATES LEFT CHANNEL ONLY
MAIN AMP IC
IC101
SPEAKERS
HEADPHONES
AC-M512/L, AC-A510/L
IC301 TC4052BP
VOI
MVOL
CONTROL
R ch
IC201 TC9176P
IC202 M5218P
BUF
VR CONTROL
ST
DATA
E/M VR
CK
+5V
D11 on BASE PCB
+13V
+20V
+8V
-8V
-13V
TR106, D106 on BASE PCB
TR107, D107 on BASE PCB
TR101, TR102 TR105, TR106 D102
TR103, TR104 D101
T901
POWER SUPPLY BLK

AC-M312/L, AC-M512/L
AC-A510/L
AMP SECTION
BLOCK DIAGRAM
NO. 2-2 860808B



A
B
C
D
E
F
1
2
3
4
5
6
7
8
ANTENNA
FM (75Ω)
AM
TM I
SW I
U MODEL ONLY
CD
PHONO
U MODEL ONLY
C121 0.047 (Z)
C137 0.047(Z)
C138 0.047(Z)
J101
J102
J103
POWER SUPPLY
V MODEL ONLY
C136 0.047(Z)
LINE OUT
AC-M312/L
AC-M512/L
BASE PCB
C1016A5020 : EXCEPT L MODEL
C1016A5025 : L MODEL
J106
ENC
GND
Rch
Lch
W103
W104
J105
+13V
Lch (REC)
Rch (REC)
MUTE
W601
AC-A510/L
AC-M512/L
AC-M312/L
J104
REF
S1
CK
STB
MONO
MUTE
ST
TUNE
STEP
J201
DATA
J1
+5V
A
B
LEVEL
E/M
J107
GND(M)
+12V (M)
+13V (T)
-13V
+20V
GND(T)
J202
W210
W301
W202
W201
18
IC 5 μPC1490HA
DETECTOR
LIMITER
AMP
SHAPER
BPF
ABLC
Vcc
OUT
IN
6.2V
1.1V
1.6V
0V
2.2V
1.9V
2.1V
C30 330P(K)
R56 160K
C31 3.3/50(M)
R59 4.7
C32 0.1/50(M)
D21 PN323B
DETECTOR PCB
C1016A504C
AC-M512/L , AC-A510/L
W404
W405
W401
STEREO
CONTROL PCB
C1016A504A AC-M312/L, AC-M512/L, AC-A510/L MODEL
AC-M512/L, AC-A510/L
W402
W403
J2
J3
MATRIX 32
31
BT
30
29
28
27
26
25
24
W201, W202
LCD PCB
C1016A503D
W103 R
ENCODER VOLUME PCB
C1016A501E
AC-M512/L , AC-A510/L
VR 18
100K
VR170
100(B)
VOLUME
C1016A50
DECK PCB
C1016A503A
J200
W303
W302
GND (OSC)
+13V (MOTOR)
GND (MOTOR)
+13V (AMP)
GND (AMP)
PB OUT
REC IN
TAPE I
PB HEAD
P1
LEFT
RIGHT
TAPE II
REC / PB HEAD
P2
PB
REC
P3
P4
ERASE HEAD
EH
BEAT SW PCB
C1016A503C
10
W304
WW304
W305
WW305
BEAT CANCEL
09
R1 1K
R2 33K
D1 SE-3004DFK
X2
X1
ON
OFF
SW 2
SW 1
W306
WW306
REC
DUBBING SPEED
DOLBY NR
DOLBY SW PCB
C1016A503B
P6
P5
M
MUTE SW 3
METAL SW 2
70μS SW 1
REC SW4
TAPE II
TAPE I

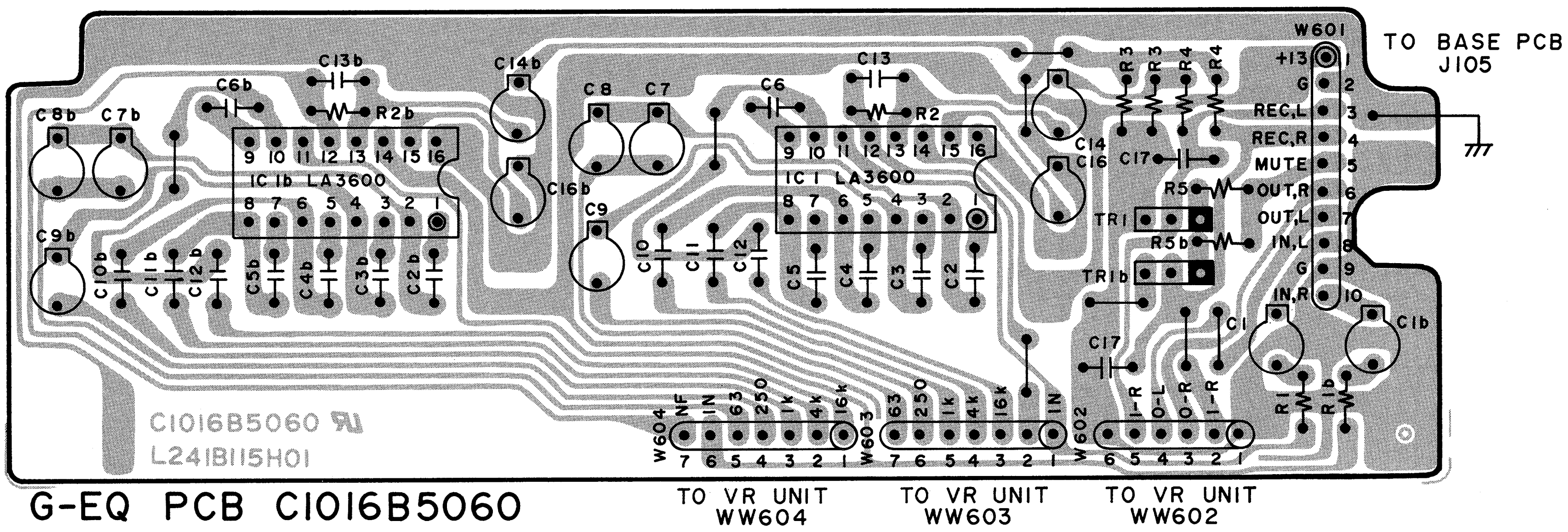

F
G
H
I
J
K
1
2
3
4
5
6
7
8
15
ENCODER VOLUME PCB
C1016A501E
AC-M512/L, AC-A510/L
VR 180
100K x2
W103
W104
W601
W605
16
IC 1b
LA3600
IC 1
LA3600
G-EQ PCB C1016B5060
TR1b
2SD1012
(F.G)
W604
WW604
W602
WW602
W603
WW603
BARANCE
16K
4K
1K
250
63
3T
1T
GND
L
R
VR UNIT VR901 JK252-5G(6)
IC1
LA3600
W401
+5V
+13V
GND
A
B
LEVEL
ENC
E/M
AC-M512/L, AC-A510/L
AC-M512/L, AC-A510/L MODEL
W403
J3
AC-M312/L
VR170
100(B)
W101
WW101
Lch
Rch
VOLUME PCB
C1016A501D
TM1
SPEAKERS
W105
WW105
W102
WW102
14
PHONES
V MODEL
C160b
C160 220P(K)
R160 1W 220
R160b
J160
HLJ2318-3040
HEAD PHONE PCB
C1016A501C
P102
MUTE
P101
GND(M)
+13V(M)
+13V(T)
-13V
+13V
GND(C)
GND(S)
GND(M·C)
GND(R)
+20V
GND(T)
J101
TO W303
TO W302
MAIN PCB
C1016A501A
BEAT CANCEL
SW1
ON
OFF
DOLBY NR
T901
RED
BLK
YLW
POWER
13
F1
SW150
3.15A
125V
C150
0.01/400AC(P)
AC 120V
60Hz
R150
1/2W 2.2M(K)
POWER SW PCB
C1016A501B
= B(POWER SUPPLY) LINE
= SIGNAL LINE

WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL. NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT

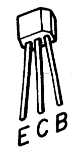
## AC-M312/L, AC-M512/L, AC-A510/L
## CONNECTION DIAGRAM

NO.7-1 870423A

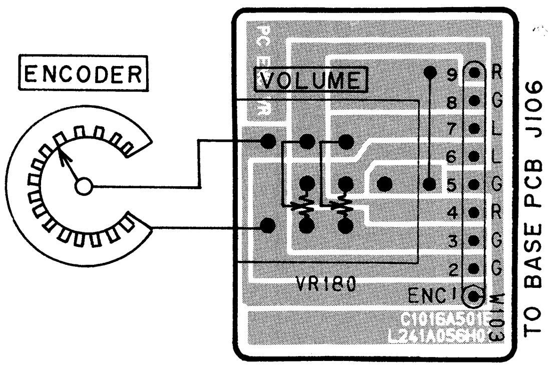

W601
TO BASE PCB J105
+13
G
REC,L
REC,R
MUTE
OUT,R
OUT,L
IN,L
G
IN,R
C8b
C7b
C9b
C6b
C13b
R2b
C14b
C16b
IC1b LA3600
C10b
C11b
C12b
C5b
C4b
C3b
C2b
C8
C7
C9
C6
C13
R2
IC1 LA3600
C10
C11
C12
C5
C4
C3
C2
C14
C16
C17
R3
R4
R5
R5b
TR1
TR1b
C1
C1b
R1
R1b
C17
C1016B5060
L241B115H01
W604
NF
IN
63
250
1k
4k
16k
W603
63
250
1k
4k
16k
IN
W602
I-R
O-L
O-R
I-L
TO VR UNIT WW604
TO VR UNIT WW603
TO VR UNIT WW602

## G-EQ PCB C1016B5060

TR1 ···· 2SD1012

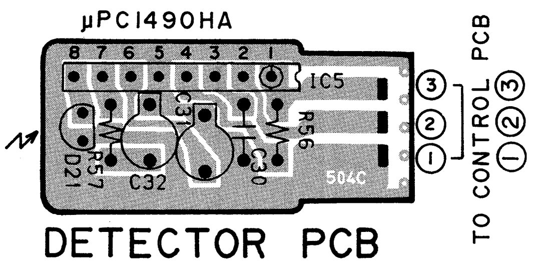


2SD1012


ENCODER
VOLUME
VR180
ENC1
9 R
8 G
7 L
6 L
5 G
4 R
3 G
2 G
W103
C1016A501E
L241A056H01
TO BASE PCB J106

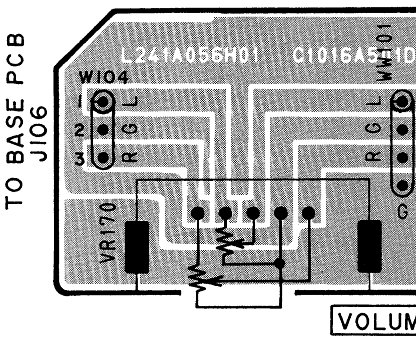
## ENCODER VOLUME PCB C1016A501E

AC-M512/L
AC-A510/L ONLY


μPC1490HA
8 7 6 5 4 3 2 1
IC5
D21
R57
C31
C32
R56
C30
504C
③
②
①
TO CONTROL PCB ①②③

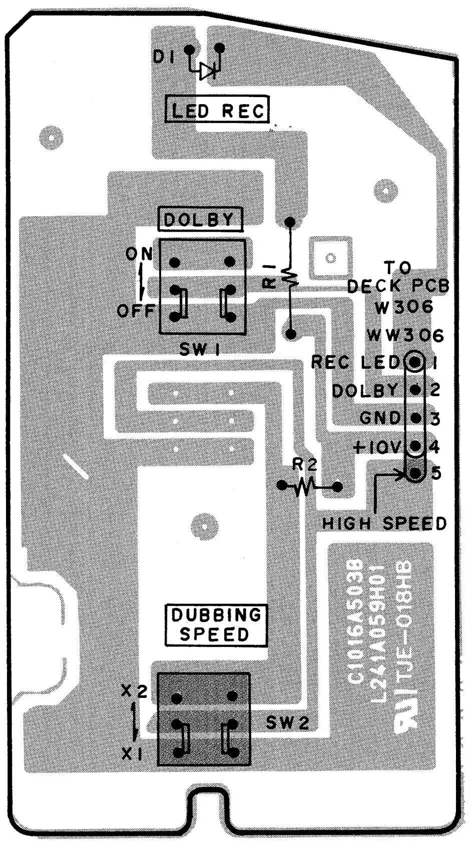
## DETECTOR PCB C1016A504C

AC-M512/L
AC-A510/L ONLY

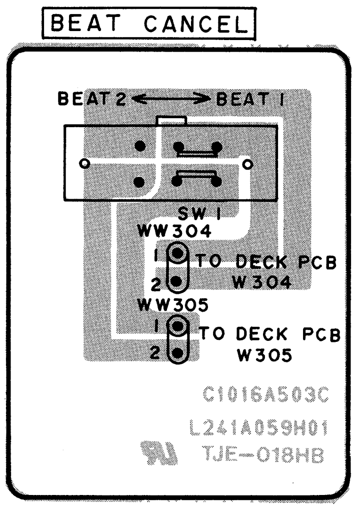

TO BASE PCB J106
L241A056H01
C1016A501D
W104
1 G
2 L
3 R
VR170
VOLUME

## VOLUME PCB C1016A501D

AC-M312/L ONLY

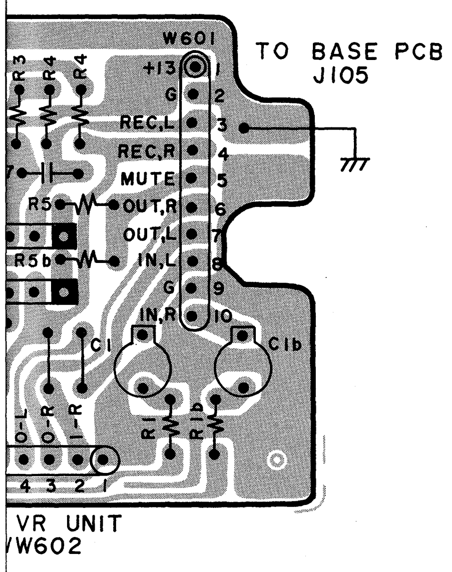

D1
LED REC
DOLBY
ON
OFF
SW1
R1
TO DECK PCB W306
WW306
REC LED 1
DOLBY 2
GND 3
+10V 4
5
R2
HIGH SPEED
DUBBING SPEED
X2
X1
SW2
C1016A503B
L241A059H01
TJE-018HB

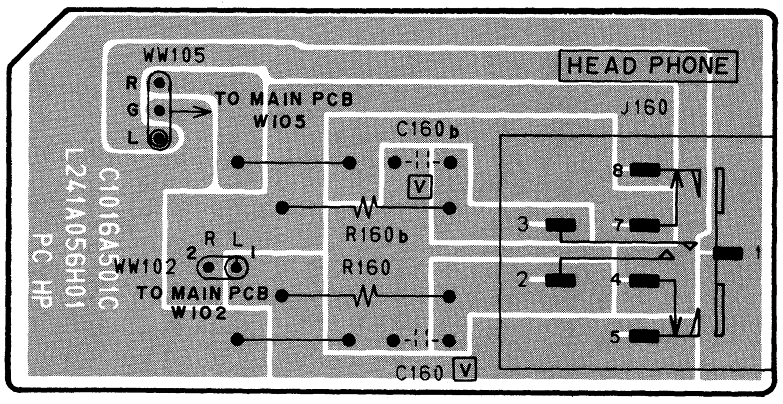
## DOLBY SW PCB C1016A503B


BEAT CANCEL
BEAT 2
BEAT 1
SW1
WW304
1
2
TO DECK PCB W304
WW305
1
2
TO DECK PCB W305
C1016A503C
L241A059H01
TJE-018HB

## BEAT SW PCB C1016A503C

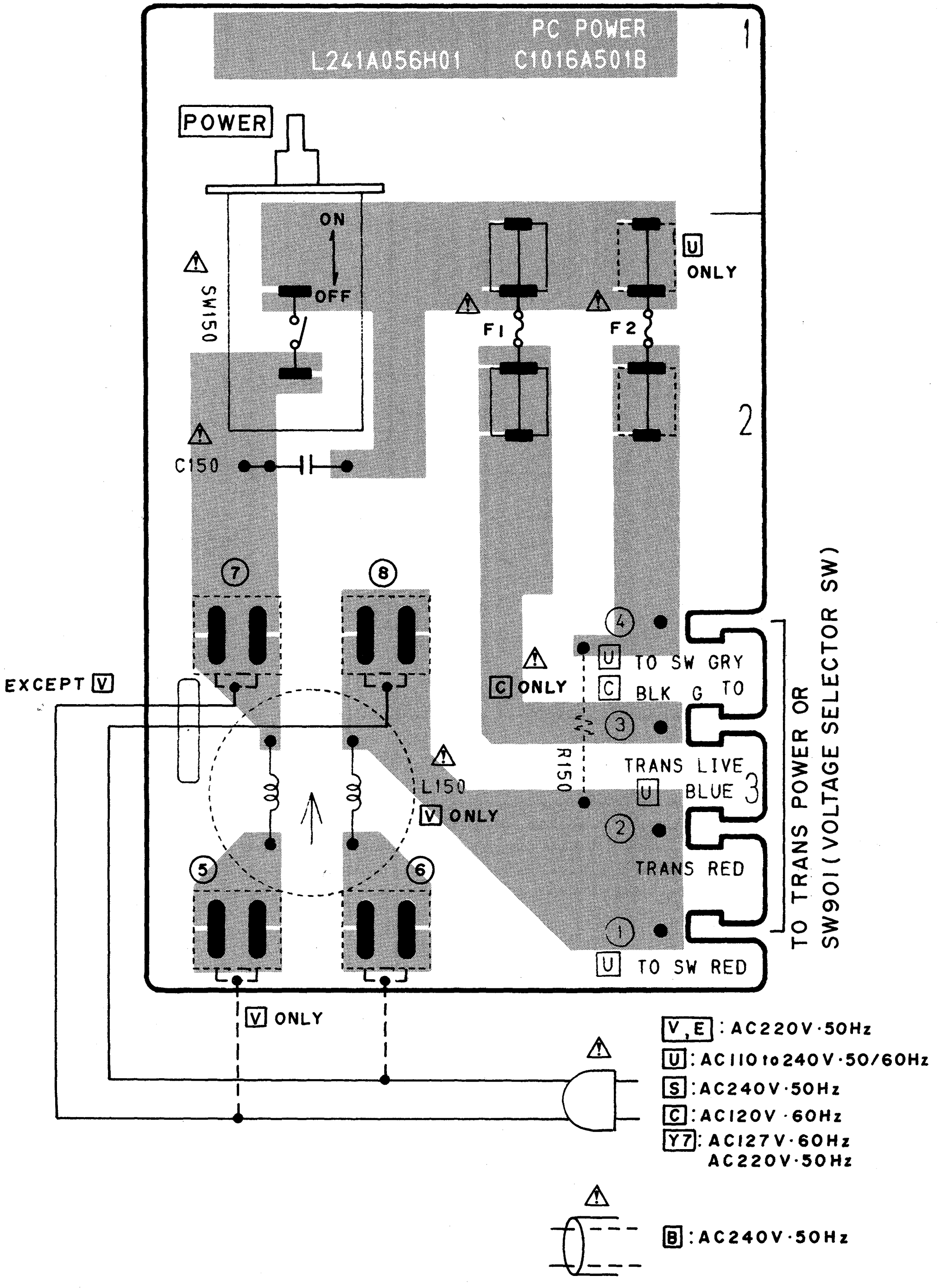
Parts indicated ▨ are used for models AC- M512 / L and AC- A510 / L ONLY.

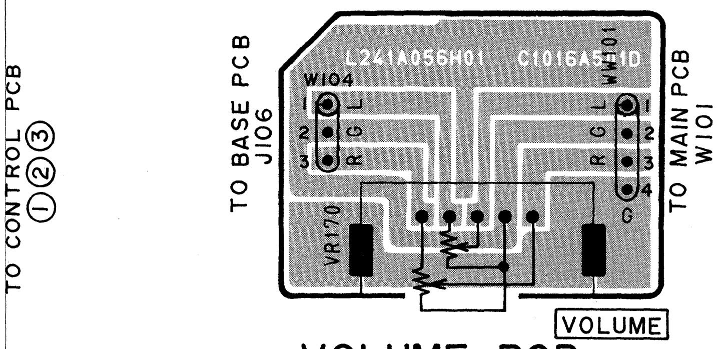

W601
TO BASE PCB
J105
+13
G
REC,L
REC,R
MUTE
OUT,R
OUT,L
IN,L
G
IN,R
R5
R5b
C1
C1b
R1
R1b
VR UNIT
W602


WW105
R
G
L
TO MAIN PCB
W105
HEAD PHONE
J160
C160b
V
R160b
R160
WW102
TO MAIN PCB
W102
C160 V
C1016A501C
L241A056H01
PC HP

## HEAD PHONE PCB C1016A501C

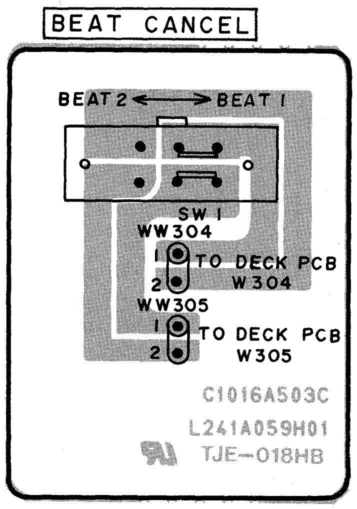
## POWER SW PCB C1016A501B


PC POWER
L241A056H01
C1016A501B
POWER
ON
OFF
SW150
U ONLY
F1
F2
C150
⑦
⑧
⑤
⑥
EXCEPT V
L150
V ONLY
C ONLY
R150
④ U TO SW GRY
C BLK G TO
③ TRANS LIVE
U BLUE
② TRANS RED
① U TO SW RED
TO TRANS POWER OR SW901 (VOLTAGE SELECTOR SW)
V ONLY
V,E : AC220V·50Hz
U : AC110 to 240V·50/60Hz
S : AC240V·50Hz
C : AC120V·60Hz
Y7 : AC127V·60Hz AC220V·50Hz
B : AC240V·50Hz


TO CONTROL PCB ①②③
TO BASE PCB J106
W104
L241A056H01
C1016A501D
W101
TO MAIN PCB W101
R
G
L
G
VR170
VOLUME

## VOLUME PCB C1016A501D

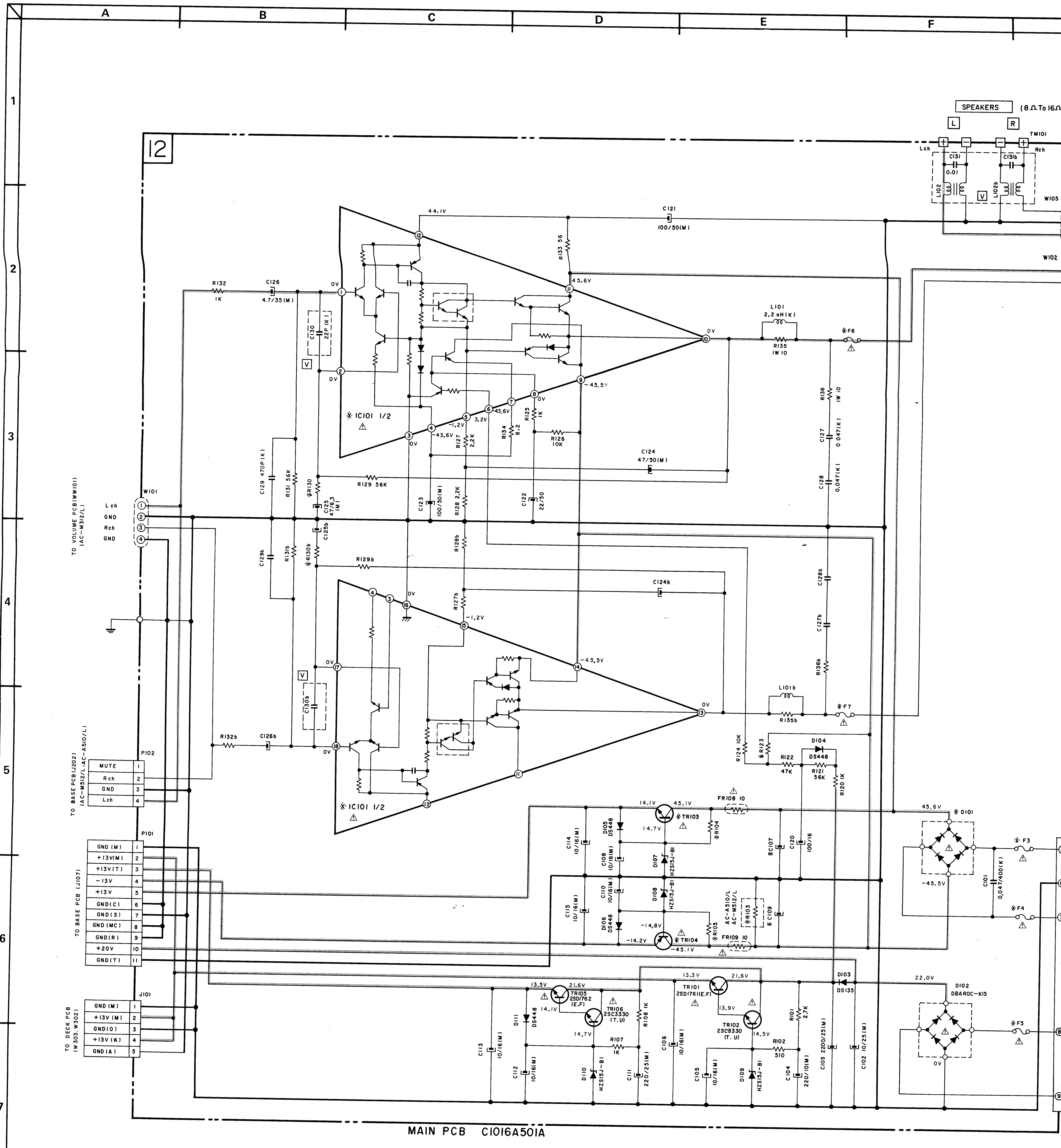
AC-M312/L ONLY


BEAT CANCEL
BEAT 2
BEAT 1
SW1
WW304
TO DECK PCB
W304
WW305
TO DECK PCB
W305
C1016A503C
L241A059H01
TJE-018HB

## BEAT SW PCB C1016A503C

WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

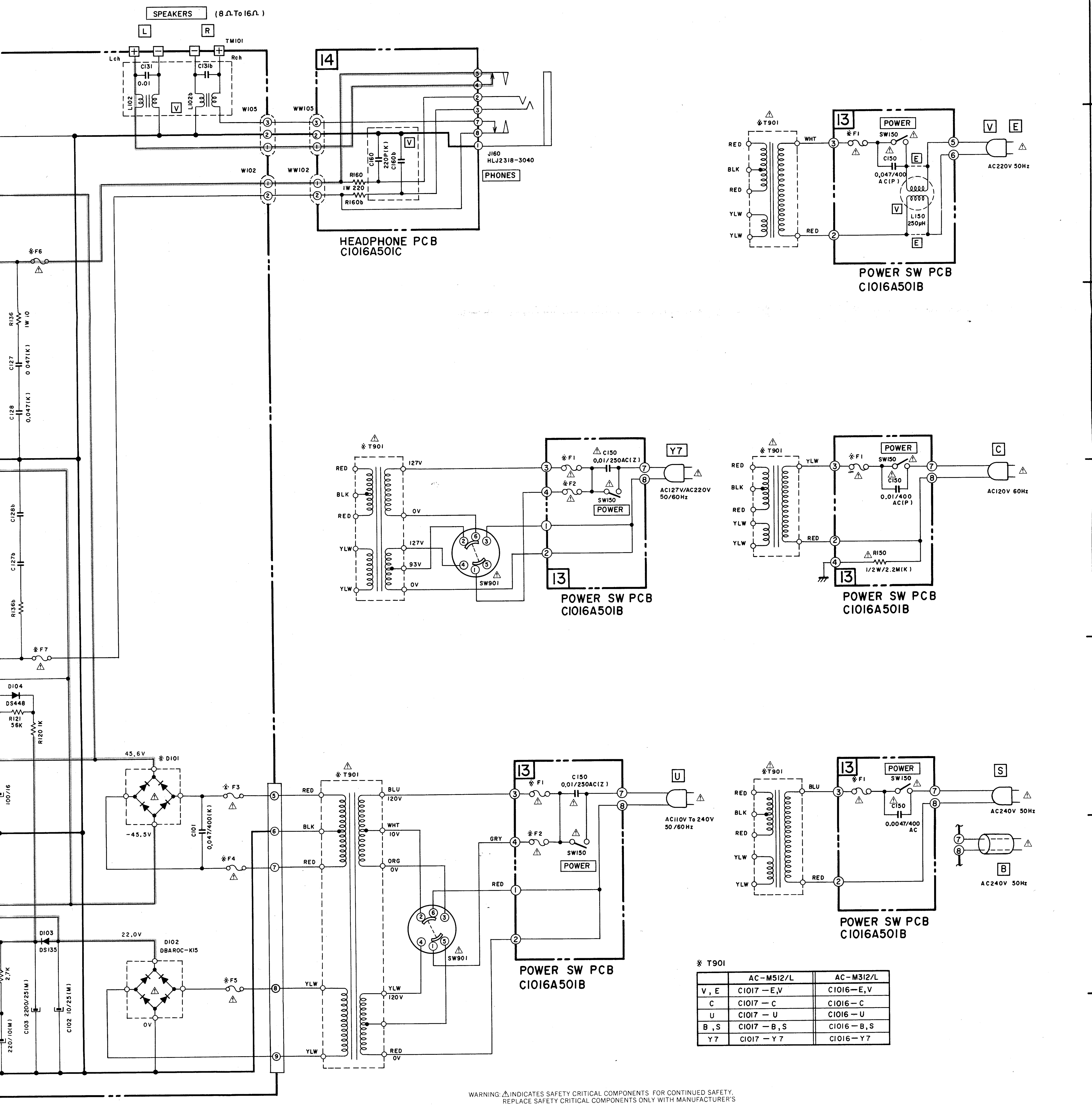

12
SPEAKERS (8Ω To 16Ω
L
R
TM101
Lch
Rch
C131
0.01
C131b
L102
L102b
W105
W102
V
※IC101 1/2
C121 100/50(M)
R133 56
44.1V
45.6V
R132 1K
C126 4.7/35(M)
C130 22P(K)
L101 2.2uH(K)
R135 1W 10
※F6
R136 1W 10
C127 0.047(K)
C128 0.047(K)
C124 47/50(M)
R125 1K
R126 10K
R127 2.2K
R134 8.2
-45.5V
-43.6V
-1.2V
3.2V
43.6V
0V
C129 470P(K)
R131 56K
※R130
R129 56K
C125 47/6.3(M)
C123 100/50(M)
R128 2.2K
C122 22/50
W101
Lch
GND
Rch
GND
TO VOLUME PCB(WW101) (AC-M312/L)
C129b
R131b
※R130b
C125b
R129b
R128b
C124b
R127b
C128b
C127b
R136b
L101b
R135b
※F7
R132b
C126b
C130b
TO BASE PCB(J202) (AC-M512/L·AC-A510/L)
P102
MUTE
Rch
GND
Lch
P101
TO BASE PCB (J107)
GND (M)
+13V(M)
+13V(T)
-13V
+13V
GND(C)
GND(S)
GND(MC)
GND(R)
+20V
GND(T)
J101
TO DECK PCB (W303.W302)
GND (M)
+13V (M)
GND(D)
+13V (A)
GND (A)
R124 10K
※R123
R122 47K
D104 DS448
R121 56K
R120 1K
※TR103
※TR104
14.1V
45.1V
14.7V
-14.8V
-14.2V
-45.1V
FR108 10
FR109 10
※R104
※R105
※R103
C114 10/16(M)
C115 10/16(M)
D105 DS448
D106 DS448
C108 10/16(M)
C110 10/16(M)
D107 HZS15J-B1
D108 HZS15J-B1
※C107
C120 100/16
※C109
AC-A510/L AC-M512/L
※D101
※F3
※F4
※F5
C101 0.047/400(K)
D102 DBA40C-K15
D103 DS135
22.0V
TR105 2SD1762 (E.F)
TR106 2SC3330 (T.U)
TR101 2SD1761(E.F)
TR102 2SC3330 (T.U)
13.5V
21.6V
14.1V
14.7V
13.3V
13.9V
14.5V
D111 DS448
C113 10/16(M)
C112 10/16(M)
R107 1K
D110 HZS15J-B1
C111 220/25(M)
R106 1K
C106 10/16(M)
C105 10/16(M)
D109 HZS15J-B1
R102 510
C104 220/10(M)
R101 2.7K
C103 2200/25(M)
C102 10/25(M)
A
B
C
D
E
F
1
2
3
4
5
6
7

MAIN PCB C1016A501A

| ※ | C107. 109 | D101 | IC101 | R104.105 | R123 | R130 | TR103 | TR104 | R103 |
|---|---|---|---|---|---|---|---|---|---|
| AC-M512/L, AC-A510/L | 4700/50 | DBA60C-K15 | STK4172-II | 12K | 270K | 680 | 2SD1761 (E.F) | 2SB1187 (E.F) | 2W 2.2K |
| AC-M312/L | 4700/45 | DBA40C-K15 | STK4152-II | 10K | 220K | 750 | 2SD1762 (E.F) | 2SB1185 (E.F) | ——— |

▨ =B (POWER SUPPLY) LINE
▨ =SIGNAL LINE

| ※ | AC-M312/L | | | | | | | AC-M512/L, AC-A510/L | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | F1 | F2 | F3 | F4 | F5 | F6 | F7 | F1 | F2 | F3 | F4 | F5 | F6 | F7 |
| U | 1.6A/250V | 1.6A/250V | ——— | ——— | ——— | 4A/250V | 4A/250V | 2A/250V | 2A/250V | ——— | ——— | ——— | 4A/250V | 4A/250V |
| C | 3.15A/125V | ——— | 5A/125V | 5A/125V | 1.6A/125A | 4A/125V | 4A/125V | 3.15A/125V | ——— | 6.3A/125V | 6,3A/125V | 1.6A/125V | 4A/125V | 4A/125V |
| E·V·S | T1A/250V | ——— | T3.15A/250V | T3.15A/250V | T1.25A/250V | T2.5A/250V | T2.5A/250V | T1.25A/250V | ——— | T4A/250V | T4A/250V | T1.25A/250V | T3.15A/250V | T3.15A/250V |
| B | T1A/250V | ——— | T3.15A/250V | T3.15A/250V | T1.25A/250V | T2.5A/250V | T2.5A/250V | T1,25A/250V | ——— | T4A/250V | T4A/250V | T1.25A/250V | T3.15A/250V | T3.15A/250V |
| Y7 | 1.6A/250V | 1.6A/250V | ——— | ——— | ——— | 4A/250V | 4A/250V | 2A/250V | 2A/250V | ——— | ——— | ——— | 4A/250V | 4A/250V |


SPEAKERS (8Ω To 16Ω)
L
R
TM101
Lch
Rch
C131
C131b
0.01
L102
L102b
V
W105
WW103
W102
WW102
14
R160
1W 220
R160b
C160
220P(K)
C160b
V
J160
HLJ2318-3040
PHONES
HEADPHONE PCB
C1016A501C
※F6
R136
1W 10
C127
0.047(K)
C128
0.047(K)
C128b
C127b
R136b
※F7
D104
DS448
R121
56K
R120 1K
45.6V
※D101
-45.5V
※F3
※F4
C101
0.047/400(K)
D103
DS135
22.0V
D102
DBAROC-K15
0V
※F5
C103 2200/25(M)
C102 10/25(M)
220/10(M)
2.7K
100/16
※T901
RED
BLK
RED
YLW
YLW
WHT
13
POWER
SW150
※F1
C150
0.047/400
AC(P)
L150
250μH
E
V
AC220V 50Hz
POWER SW PCB
C1016A501B
127V
0V
93V
SW901
※F2
C150
0.01/250AC(Z)
Y7
AC127V/AC220V
50/60Hz
C
0.01/400
AC(P)
AC120V 60Hz
R150
1/2W/2.2M(K)
BLU
120V
10V
ORG
GRY
U
AC110V To 240V
50/60Hz
S
0.0047/400
AC
AC240V 50Hz
B
AC240V 50Hz

※ T901

| | AC-M512/L | AC-M312/L |
|---|---|---|
| V, E | C1017 — E,V | C1016—E,V |
| C | C1017 — C | C1016— C |
| U | C1017 — U | C1016 — U |
| B, S | C1017 — B, S | C1016 — B, S |
| Y7 | C1017 — Y 7 | C1016— Y7 |

WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY,
REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S
RECOMMENDED PARTS

AVERTISSEMENT: ⚠IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ.
POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL,
NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

| 3 |
|---|
| 2K |
| —— |

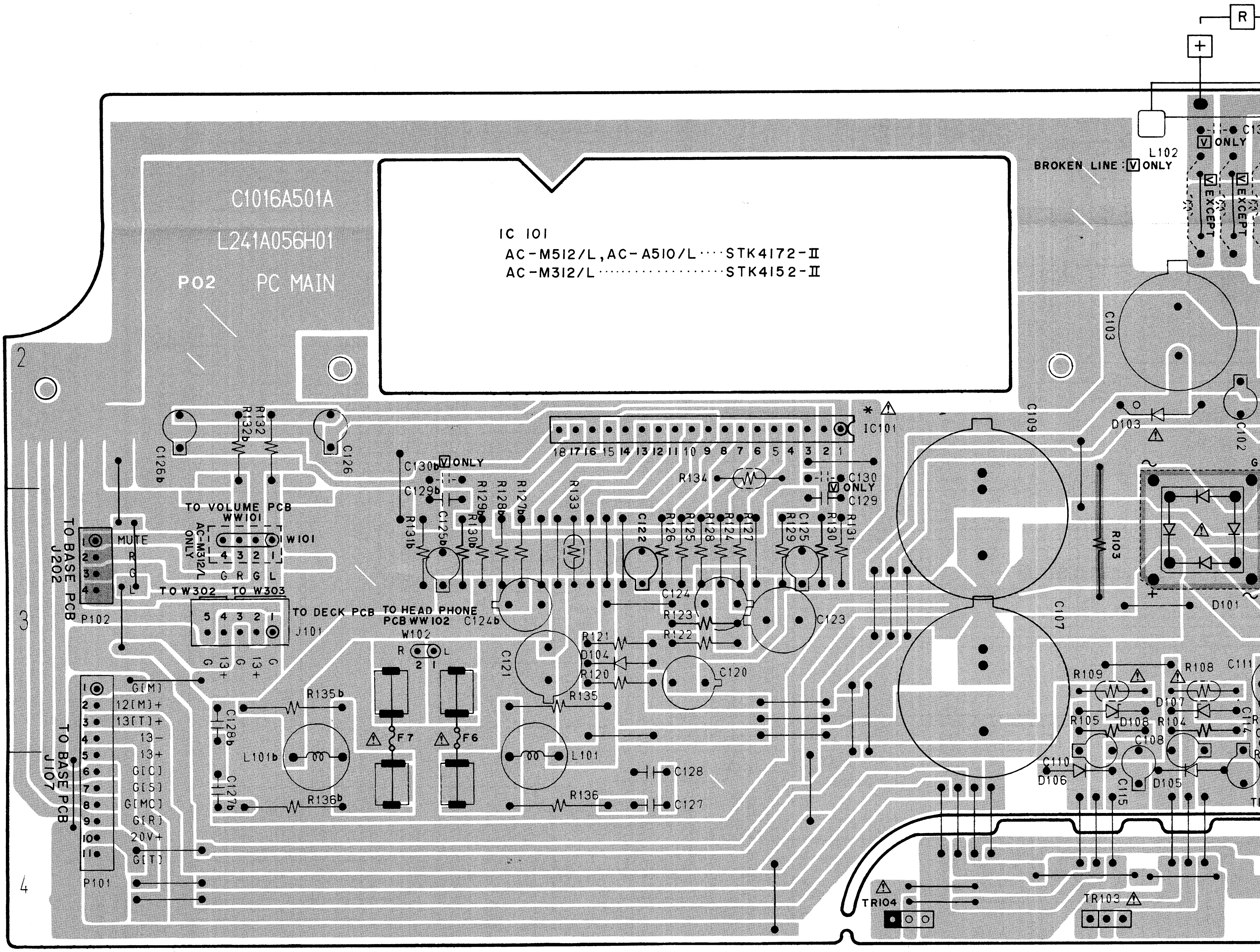
▬ =B(POWER SUPPLY)LINE
▬ =SIGNAL LINE

| /L , AC-A510/L | | | |
|---|---|---|---|
| | F5 | F6 | F7 |
| —— | —— | 4A/250V | 4A/250V |
| 25V | 1.6A/125V | 4A/125V | 4A/125V |
| 50V | T1.25A/250V | T3.15A/250V | T3.15A/250V |
| 50V | T1.25A/250V | T3.15A/250V | T3.15A/250V |
| —— | —— | 4A/250V | 4A/250V |

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/4W(J)
ALL CAPACITORS IN μF 50WV(J)
POWER TRANSFORMER IS DIFFERENT
ACCORDING TO AREA

# AC-M312/L
# AC-M512/L
# AC-A510/L
# MAIN
# SCHEMATIC DIAGRAM

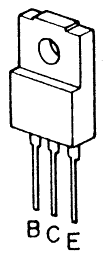
NO. 7-2 870424A


R
+
C1016A501A
L241A056H01
P02
PC MAIN
IC 101
AC-M512/L, AC-A510/L ···· STK4172-II
AC-M312/L ·················· STK4152-II
BROKEN LINE : V ONLY
L102
V ONLY
V EXCEPT
C103
C109
D103
C102
IC101
18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
R132
R132b
C126b
C126
C130b V ONLY
C129b
R129b
R128b
R127b
R133
R134
C130
V ONLY
C129
R131b
C125b
R130b
C122
R126
R125
R128
R124
R127
C125
R129
R130
R131
R103
D101
TO VOLUME PCB
WW101
AC-M312/L ONLY
W101
G R G L
MUTE
TO BASE PCB J202
P102
TO W302
TO W303
TO DECK PCB
J101
TO HEAD PHONE PCB WW102
C124b
W102
C124
R123
R122
C123
C107
C121
R121
D104
R120
C120
R135
R135b
C128b
L101b
F7
F6
L101
C128
C127b
R136b
R136
C127
G(M)
12(M)+
13(T)+
13-
13+
G(C)
G(S)
G(MC)
G(R)
20V+
G(T)
TO BASE PCB J107
P101
R109
R108
C111
D107
R105
D108
R104
C108
C110
D106
C115
D105
TR104
TR103
2
3
4

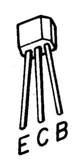
**MAIN PCB C1016A501A**

B
●●● ···· PNP TRANSISTOR
●●● ···· NPN TRANSISTOR
B

TR101 ···· 2SD1761(E,F)
TR102 ···· 2SC3330(T,U)
TR103 ···· 2SD1761(E,F) ··· AC- M512 / L, AC- A510 / L
2SD1762(E,F) ··· AC- M312 / L
TR104 ···· 2SB1187(E,F) ··· AC- M512 / L, AC- A510 / L
2SB1185(E,F) ··· AC- M312 / L
TR105 ···· 2SD1762(E,F)
TR106 ···· 2SC3330(T,U)



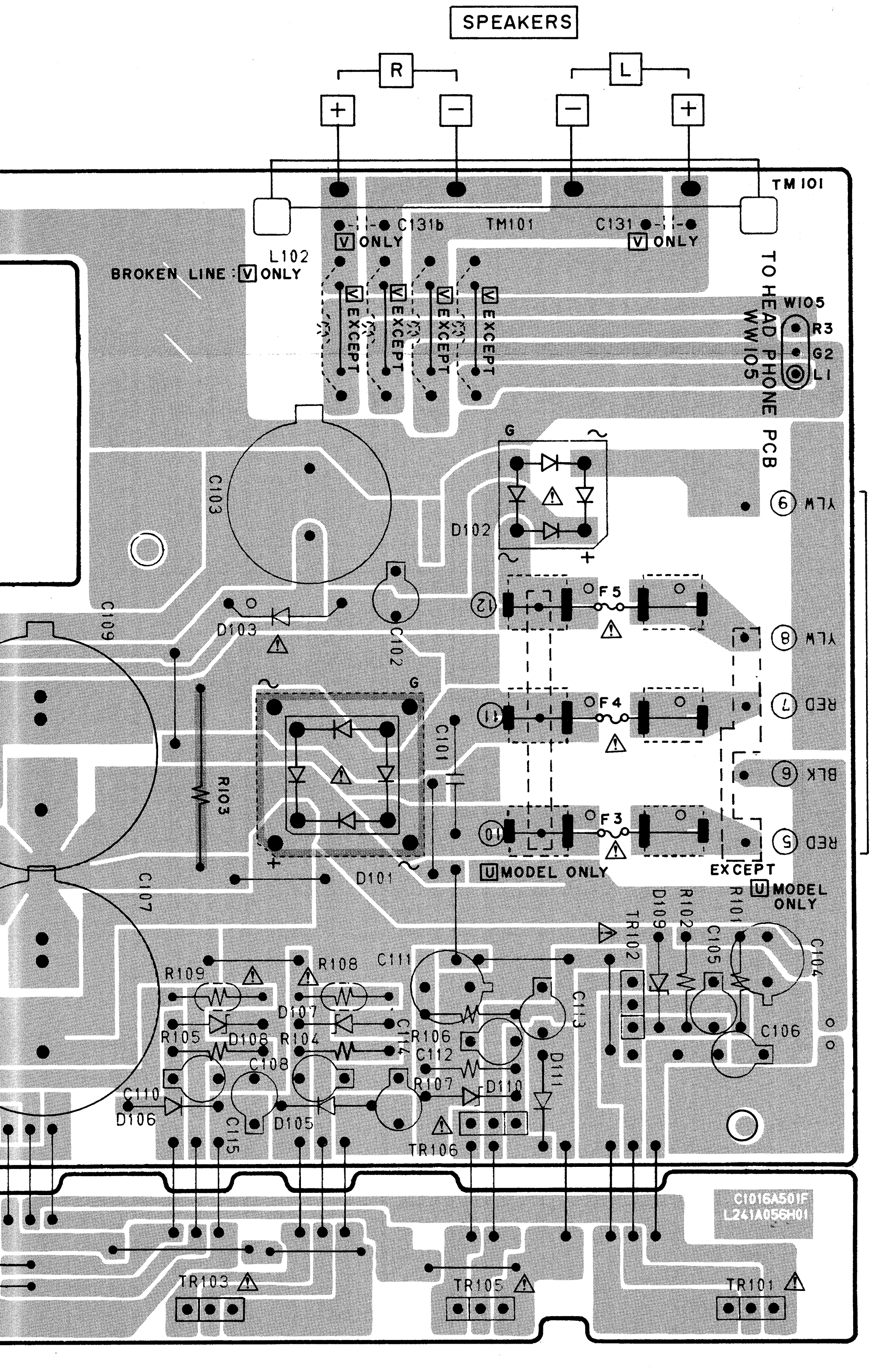
2SD1761(E,F)
2SD1762(E,F)
2SB1187(E,F)
2SB1185(E,F)



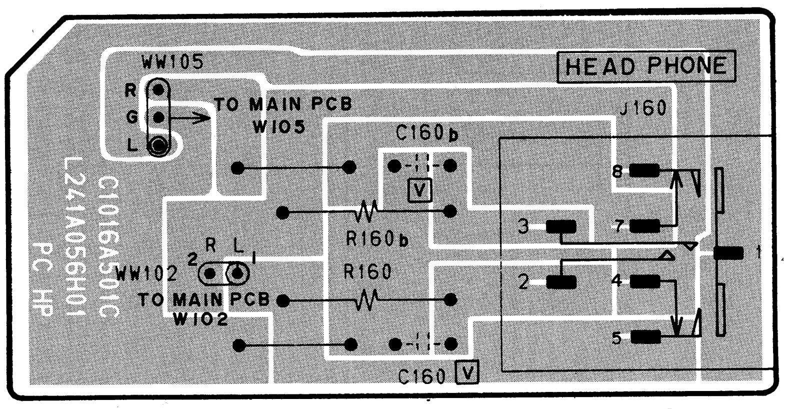
2SC3330(T,U)

Parts indi
AC- M512 / I

WARNING: ⚠INDICATES
REPLACE SA
RECOMMENI
AVERTISSEMENT: ⚠IL I
POUR MAINT
NE REMPLAC

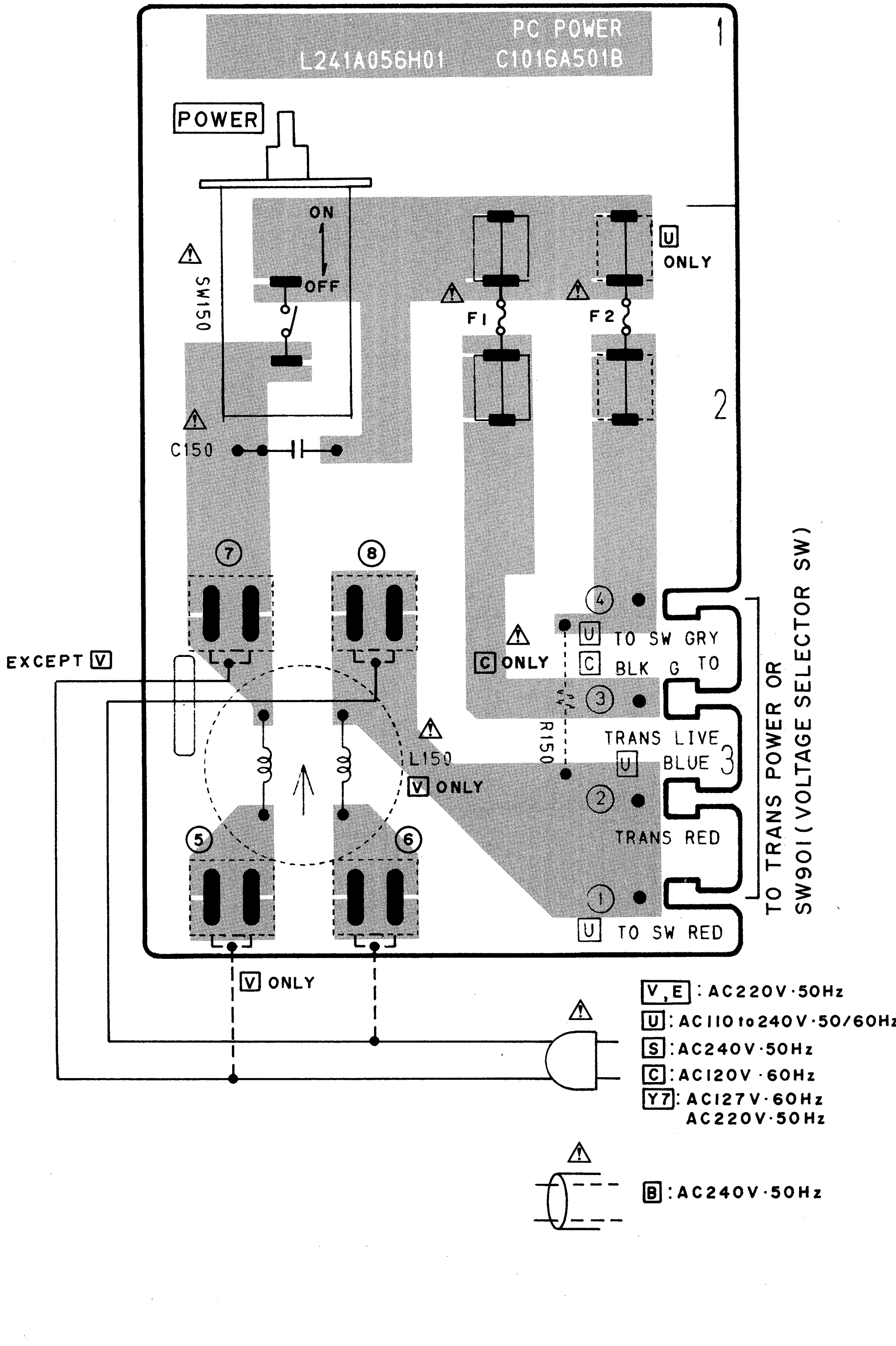

SPEAKERS
R
L
TM101
C131b
C131
V ONLY
L102
BROKEN LINE : V ONLY
V EXCEPT
TO HEAD PHONE PCB WW105
W105
R3
G2
L1
C103
D102
D103
C109
C102
F5
F4
F3
YLW
BLK
RED
TO TRANS POWER
R103
C101
D101
U MODEL ONLY
EXCEPT U MODEL ONLY
C107
R109
R108
C111
R105
D108
R104
D107
C114
R106
C112
R107
D110
D111
C113
C108
C110
D106
C115
D105
TR106
TR102
D109
R102
C105
R101
C104
C106
TR103
TR105
TR101
C1016A501F
L241A056H01

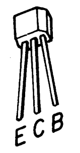
Parts indicated ▨ are used for models AC- M512 / L and AC- A510 / L only.


WW105
R
G
L
TO MAIN PCB
W105
C160b
HEAD PHONE
J160
C1016A501C
L241A056H01
PC HP
V
R160b
R160
WW102
TO MAIN PCB
W102
C160 V
8
7
3
2
4
1
5

## HEAD PHONE PCB C1016A501C

## POWER SW PCB C1016A501B

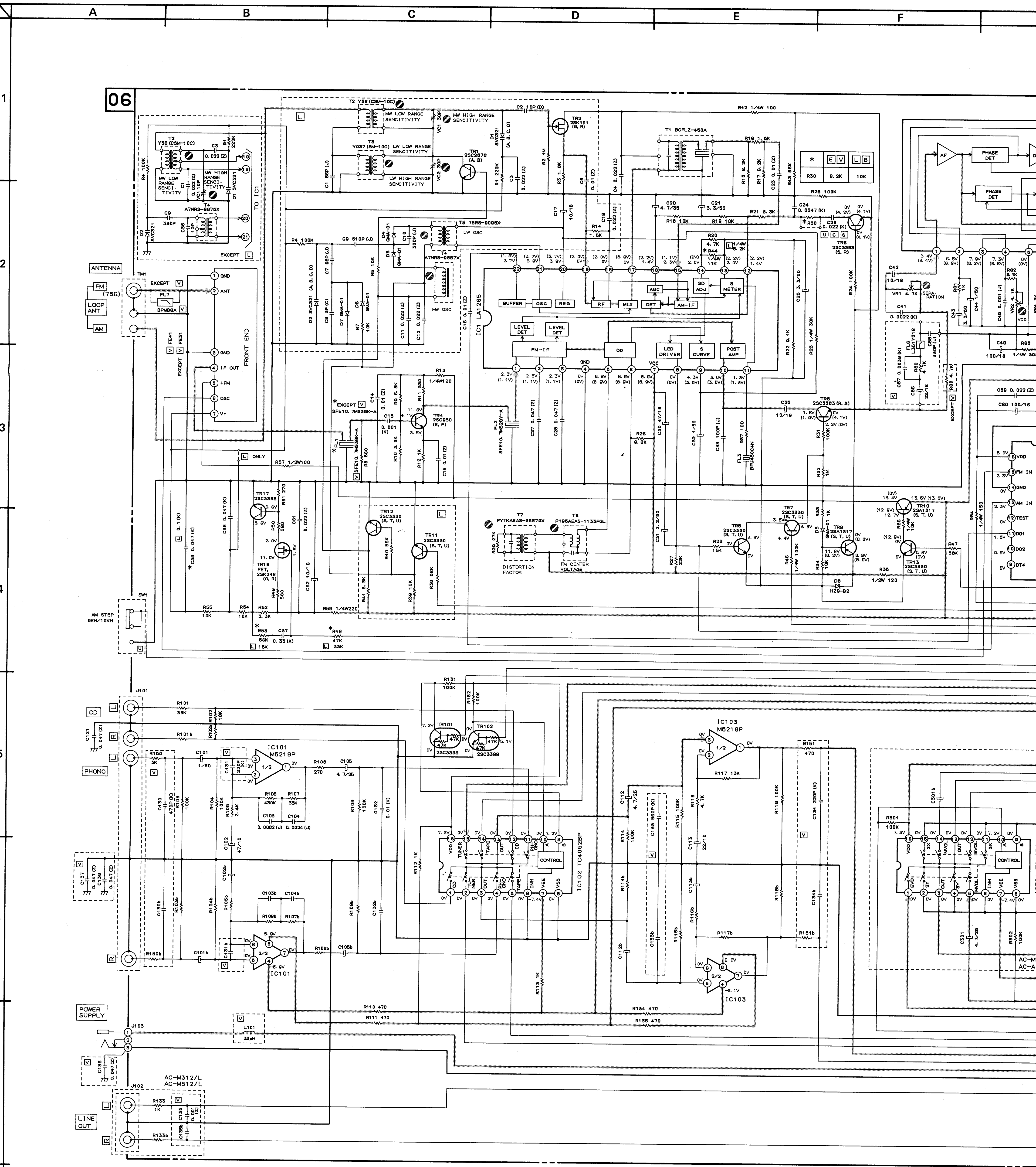

PC POWER
L241A056H01
C1016A501B
1
POWER
ON
OFF
SW150
U ONLY
F1
F2
2
C150
7
8
EXCEPT V
4
U TO SW GRY
C ONLY
C BLK G TO
3
R150
TRANS LIVE
U BLUE
3
L150
V ONLY
2
TRANS RED
5
6
1
U TO SW RED
TO TRANS POWER OR SW901 (VOLTAGE SELECTOR SW)
V ONLY
V,E : AC220V·50Hz
U : AC110 to 240V·50/60Hz
S : AC240V·50Hz
C : AC120V·60Hz
Y7 : AC127V·60Hz AC220V·50Hz
B : AC240V·50Hz



C3330(T,U)

WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT



06
A
B
C
D
E
F
ANTENNA
FM (75Ω)
LOOP ANT
AM
TM1
FL7 BPM88A
FRONT END
GND
ANT
IF OUT
+FM
OSC
Vr
TO IC1
EXCEPT L
T2 Y38 (CSM-10C)
T3 Y037 (SM-10C)
T4 A7NRS-9857X
T5 7BRS-9098X
MW LOW RANGE SENCITIVITY
MW HIGH RANGE SENCITIVITY
LW LOW RANGE SENCITIVITY
LW HIGH RANGE SENCITIVITY
LW OSC
MW OSC
TR1 2SC2878 (A, B)
TR2 2SK161 (Q, R)
T1 BCFLZ-450A
IC1 LA1265
BUFFER
OSC
REG
RF
MIX
DET
AGC
AM-IF
SD ADJ
S METER
LEVEL DET
FM-IF
QD
LED DRIVER
S CURVE
POST AMP
R30 8.2K 10K
TR6 2SC3383 (S, R)
TR4 2SC930 (E, F)
TR8 2SC3383 (R, S)
TR7 2SC3330 (S, T, U)
TR5 2SC3330 (S, T, U)
TR9 2SA1317 (S, T, U)
TR10 2SA1317 (S, T, U)
TR13 2SC3330 (S, T, U)
TR11 2SC3330 (S, T, U)
TR12 2SC3330 (S, T, U)
TR17 2SC3383
TR16 FET, 2SK246 (Q, R)
T7 PYTKAEAS-35879X
T6 P195AEAS-1133FQL
DISTORTION FACTOR
FM CENTER VOLTAGE
SW1
AM STEP 9KH/10KH
VR1 4.7K SEPARATION
VCO
AF
PHASE DET
CD
PHONO
J101
IC101 M5218P
TR101 2SC3399
TR102 2SC3399
IC102 TC4052BP
IC103 M5218P
CONTROL
TUNER
TAPE
POWER SUPPLY
J103
L101 33μH
J102
AC-M312/L
AC-M512/L
LINE OUT

BASE PCB/C1016A5020:EXCEPT L MODEL
C1016A5025: L MODEL

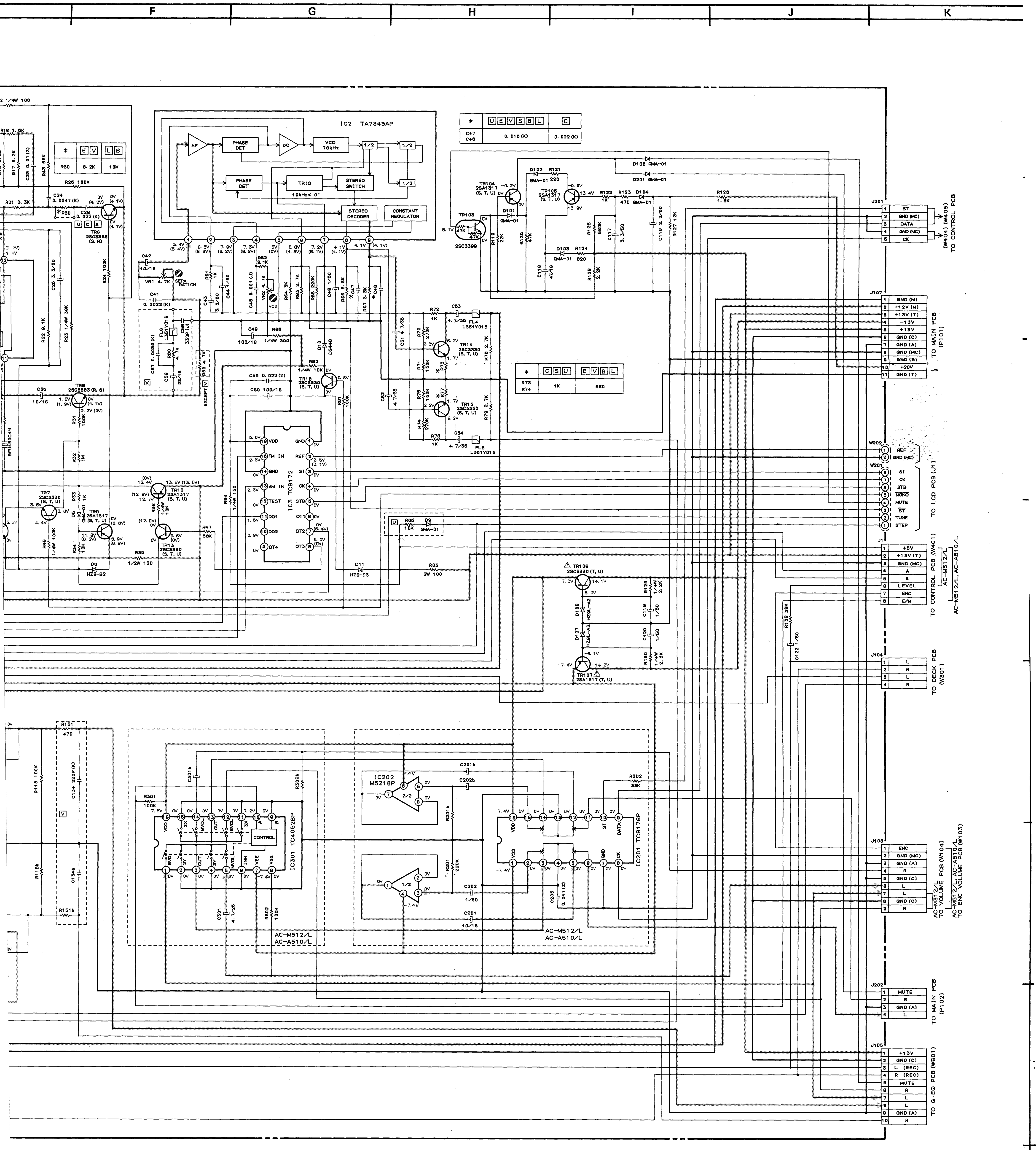
VOLTAGE AT FM STEREO TUNE MODE

( ) AT AM TUNE MODE

WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

▬ :FM SIGNAL LIN
┅ :AM SIGNAL LIN
▬ :B (POWER SUPPL


F
G
H
I
J
K
IC2 TA7343AP
AF
PHASE DET
DC
VCO 76kHz
1/2
TRIO 19kHz< 0°
STEREO SWITCH
STEREO DECODER
CONSTANT REGULATOR
SEPARATION
VCO
IC3 TC9172
VDD
FM IN
GND
AM IN
TEST
DO1
DO2
OT4
REF
SI
CK
STB
OT1
OT2
OT3
TR6 2SC3383 (S, R)
TR8 2SC3383 (R, S)
TR7 2SC3330 (S, T, U)
TR9 2SA1317 (S, T, U)
TR10 2SA1317 (S, T, U)
TR13 2SC3330 (S, T, U)
TR14 2SC3330 (S, T, U)
TR15 2SC3330 (S, T, U)
TR18 2SC3330 (S, T, U)
TR103 2SC3399
TR104 2SA1317 (S, T, U)
TR105 2SA1317 (S, T, U)
TR106 2SC3330 (T, U)
TR107 2SA1317 (T, U)
FL4 L351Y015
FL5 L351Y015
FL6 L351Y016
D8 HZ9-B2
D10 DS448
D11 HZ6-C3
EXCEPT V
IC202 M5218P
IC301 TC4052BP
IC201 TC9176P
CONTROL
AC-M512/L
AC-A510/L
J201
ST
GND (MC)
DATA
GND (MC)
CK
TO CONTROL PCB (W404) (W405)
J107
GND (M)
+12V (M)
+13V (T)
-13V
+13V
GND (C)
GND (A)
GND (MC)
GND (R)
+20V
GND (T)
TO MAIN PCB (P101)
W202
REF
GND (MC)
W201
SI
CK
STB
MONO
MUTE
ST
TUNE
STEP
TO LCD PCB (J1)
J1
+5V
+13V (T)
GND (MC)
A
B
LEVEL
ENC
E/M
TO CONTROL PCB (W401) AC-M512/L AC-M512/L, AC-A510/L
J104
L
R
L
R
TO DECK PCB (W301)
J108
ENC
GND (MC)
GND (A)
R
GND (C)
L
L
GND (C)
R
AC-M312/L TO VOLUME PCB (W104)
AC-M512/L, AC-A510/L TO ENC VOLUME PCB (W103)
J202
MUTE
R
GND (A)
L
TO MAIN PCB (P102)
J105
+13V
GND (C)
L (REC)
R (REC)
MUTE
R
L
L
GND (A)
R
TO G-EQ PCB (W601)
* | U E V S B L | C
C47 C48 | 0.015 (K) | 0.022 (K)
* | E V | L B
R30 | 6.2K | 10K
* | C S U | E V B L
R73 R74 | 1K | 680

TEREO TUNE MODE

UNE MODE

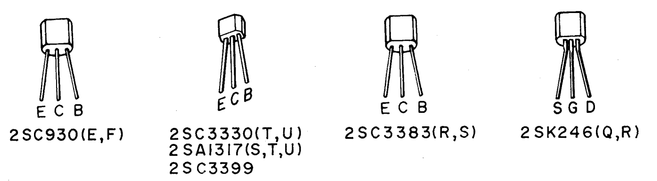
RITICAL COMPONENTS FOR CONTINUED SAFETY,
CAL COMPONENTS ONLY WITH MANUFACTURER'S

S COMPOSANTS CRITIQUES DE SÉCURITÉ.
GRÉ DE SÉCURITÉ DE L'APPAREIL,
S PIECES RECOMMANDEES PAR LE FABRICANT

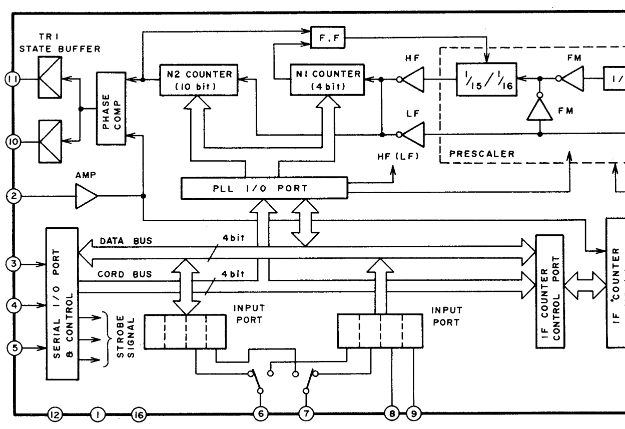
:FM SIGNAL LINE
:AM SIGNAL LINE
:B (POWER SUPPLY) LINE

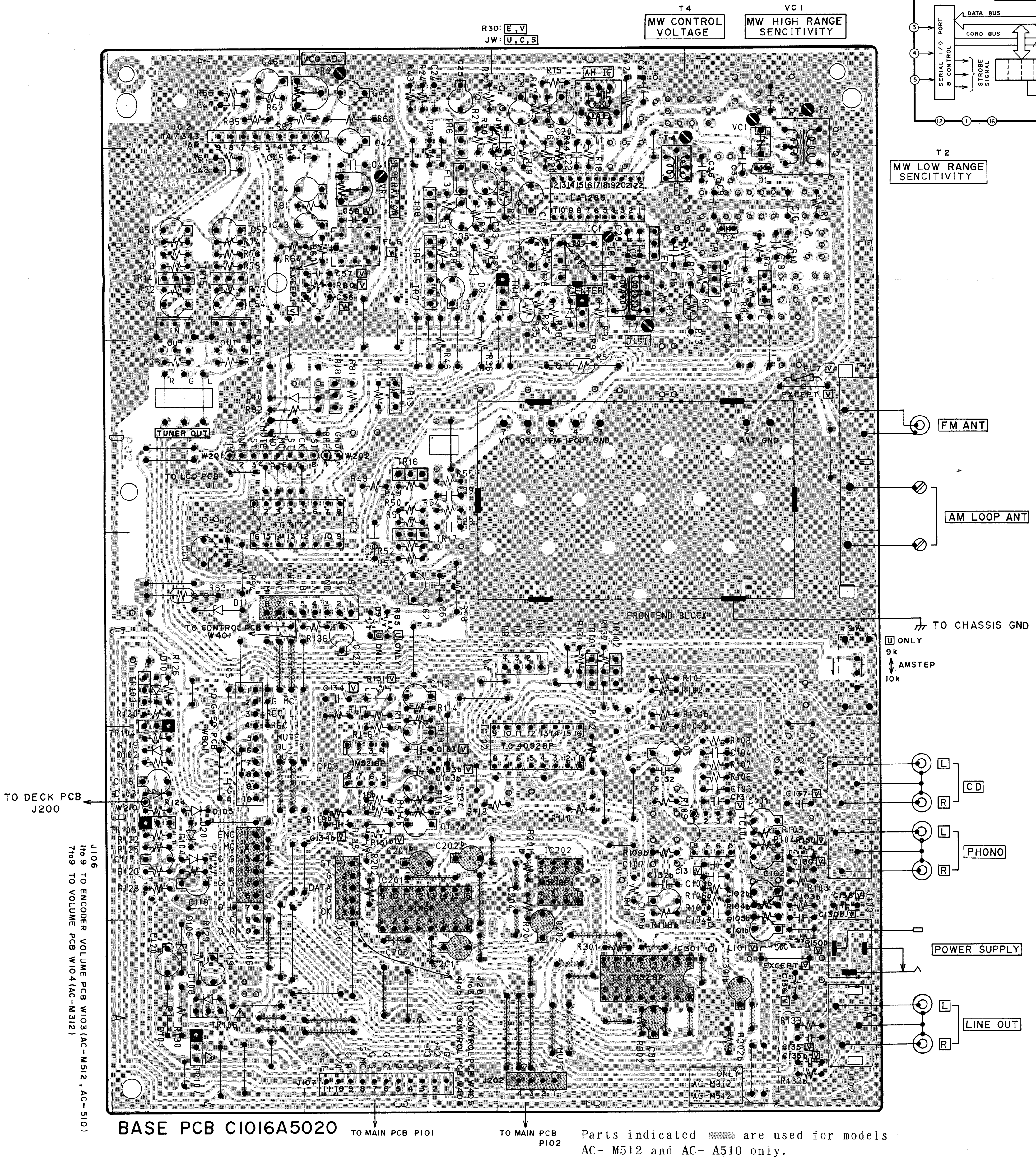
NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/6W (J)
ALL CAPACITORS IN $\mu$F 50WV (M)

BASE
SCHEMATIC DIAGRAM
NO. 7-3 870425A


E C B
2SC930(E,F)
E C B
2SC3330(T,U)
2SA1317(S,T,U)
2SC3399
E C B
2SC3383(R,S)
S G D
2SK246(Q,R)

TC 9172


TR1
STATE BUFFER
PHASE COMP
N2 COUNTER (10 bit)
N1 COUNTER (4 bit)
F.F
HF
LF
FM
1/15 / 1/16
PRESCALER
HF (LF)
AMP
PLL I/O PORT
DATA BUS
CORD BUS
4bit
SERIAL I/O PORT & CONTROL
STROBE SIGNAL
INPUT PORT
IF COUNTER CONTROL PORT


R30: E, V
JW: U, C, S
T4
MW CONTROL VOLTAGE
VC1
MW HIGH RANGE SENCITIVITY
T2
MW LOW RANGE SENCITIVITY
VCO ADJ
AM IF
SEPERATION
CENTER
DIST
IC2 TA7343AP
C1016A5020
L241A057H01
TJE-018HB
LA1265
TC 9172
TUNER OUT
TO LCD PCB J1
TO CONTROL PCB W401
FRONTEND BLOCK
FM ANT
AM LOOP ANT
TO CHASSIS GND
U ONLY
9k
AMSTEP
10k
CD
PHONO
POWER SUPPLY
LINE OUT
TO DECK PCB J200
J106 1to9 TO ENCODER VOLUME PCB W103 (AC-M512, AC-510)
7to9 TO VOLUME PCB W104 (AC-M312)
TO G-EQ PCB W601
TC 4052BP
M5218P
TC 9176P
J201 4to5 TO CONTROL PCB W405
1to3 TO CONTROL PCB W404
ONLY AC-M312
AC-M512
TO MAIN PCB P101
TO MAIN PCB P102

BASE PCB C1016A5020

Parts indicated ▨ are used for models AC- M512 and AC- A510 only.

LOCATION ON CONPONENT

IC
IC1 ···· E2
IC2 ···· F4
IC3 ···· D4
IC101 ·· B1
IC102 ·· B2
IC103 ·· B3
IC201 ·· B3
IC202 ·· B2
IC301 ·· A2

TR
TR4 ···· E1
TR5 ···· E3
TR6 ···· E3
TR7 ···· E3
TR8 ···· E3
TR9 ···· E2
TR10 ··· E2
TR13 ··· D3
TR14 ··· E4
TR15 ··· E4
TR16 ···· D3
TR17 ···· C3
TR18 ···· D3
TR101 ··· C2
TR102 ··· C2
TR103 ··· C4
TR104 ··· C4
TR105 ··· B4
TR106 ··· A4
TR107 ··· A4

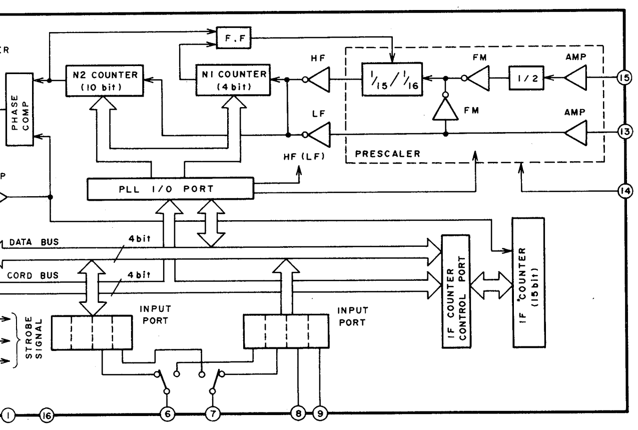
CONNECTOR
J1 ···· C3
J104 ·· C2
J105 ·· B4
J106 ·· B4
J107 ·· A3
J201 ·· B3
J202 ·· A2
W201 ·· D4
W202 ·· D3

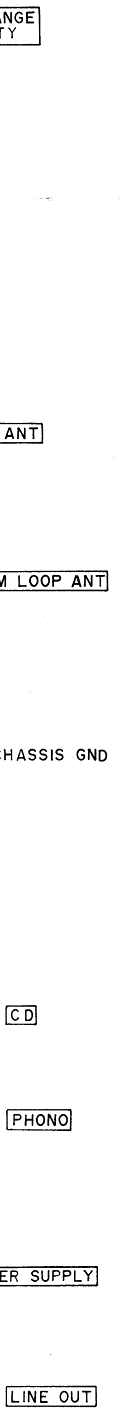
■●● ···· PNP TRANSISTOR
●●● ···· NPN TRANSISTOR
●●● ···· FET TRANSISTOR
S G D

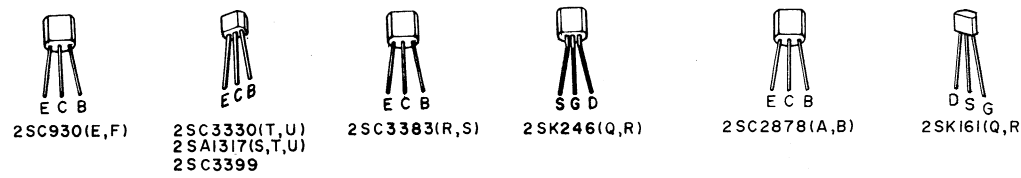
TR4 ···· 2SC930(E,F)
TR5,TR7,TR13,TR14,TR15,TR18,TR106 ···· 2SC3330(T,U)
TR6,TR8,TR17 ···· 2SC3383(R,S)
TR9,TR10,TR104,TR105,TR107 ···· 2SA1317(S,T,U)
TR16 ···· 2SK246(Q,R)
TR101,TR102,TR103 ···· 2SC3399

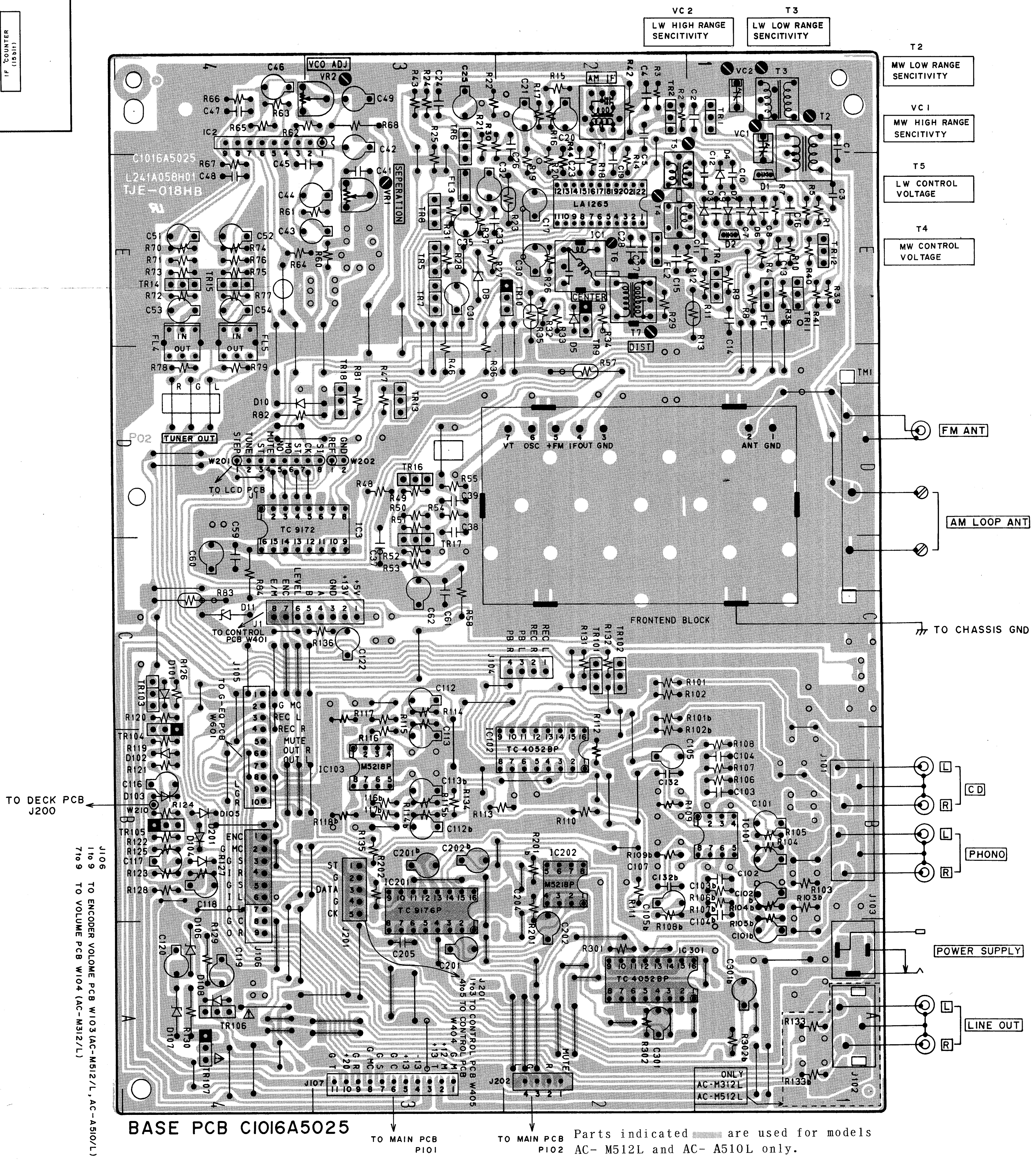
WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT


F.F
N2 COUNTER (10 bit)
N1 COUNTER (4 bit)
HF
LF
FM
AMP
1/15 / 1/16
1/2
PRESCALER
HF (LF)
PHASE COMP
PLL I/O PORT
DATA BUS
4bit
CORD BUS
4bit
INPUT PORT
INPUT PORT
STROBE SIGNAL
IF COUNTER CONTROL PORT
IF COUNTER (16bit)
15
13
14
6
7
8
9
1
16


NGE
TY
ANT
M LOOP ANT
HASSIS GND
CD
PHONO
ER SUPPLY
LINE OUT


E C B
2SC930(E,F)
E C B
2SC3330(T,U)
2SA1317(S,T,U)
2SC3399
E C B
2SC3383(R,S)
S G D
2SK246(Q,R)
E C B
2SC2878(A,B)
D S G
2SK161(Q,R)


VC2
LW HIGH RANGE SENCITIVITY
T3
LW LOW RANGE SENCITIVITY
T2
MW LOW RANGE SENCITIVITY
VC1
MW HIGH RANGE SENCITIVTY
T5
LW CONTROL VOLTAGE
T4
MW CONTROL VOLTAGE
VCO ADJ
VR2
SEPERATION
VR1
AM IF
CENTER
DIST
LA1265
C1016A5025
L241A058H01
TJE-018HB
TUNER OUT
TO LCD PCB
TC9172
TUNE STEP
ST MONO
ST
CK
ST
REF
GND
TO CONTROL PCB W401
LEVEL
ENC
E/M
+5V
+13V
GND
VT OSC +FM IFOUT GND
ANT GND
FRONTEND BLOCK
FM ANT
AM LOOP ANT
TO CHASSIS GND
TM1
TO G-EQ PCB W601
G MC REC L REC R MUTE OUT R OUT L
TO DECK PCB J200
J106
1to9 TO ENCODER VOLOME PCB W103(AC-M512/L, AC-A510/L)
7to9 TO VOLUME PCB W104 (AC-M312/L)
TC4052BP
M5218P
TC9176P
M5218P
TC4052BP
ST G DATA G CK
J201
1to3 TO CONTROL PCB W404
4to5 TO CONTROL PCB W405
J107
J202
MUTE
CD
PHONO
POWER SUPPLY
LINE OUT
ONLY AC-M312L AC-M512L
A B C D E F
1 2 3 4

BASE PCB C1016A5025

TO MAIN PCB P101

TO MAIN PCB P102

Parts indicated ▨ are used for models AC- M512L and AC- A510L only.

LOCATION OF CONPONENT

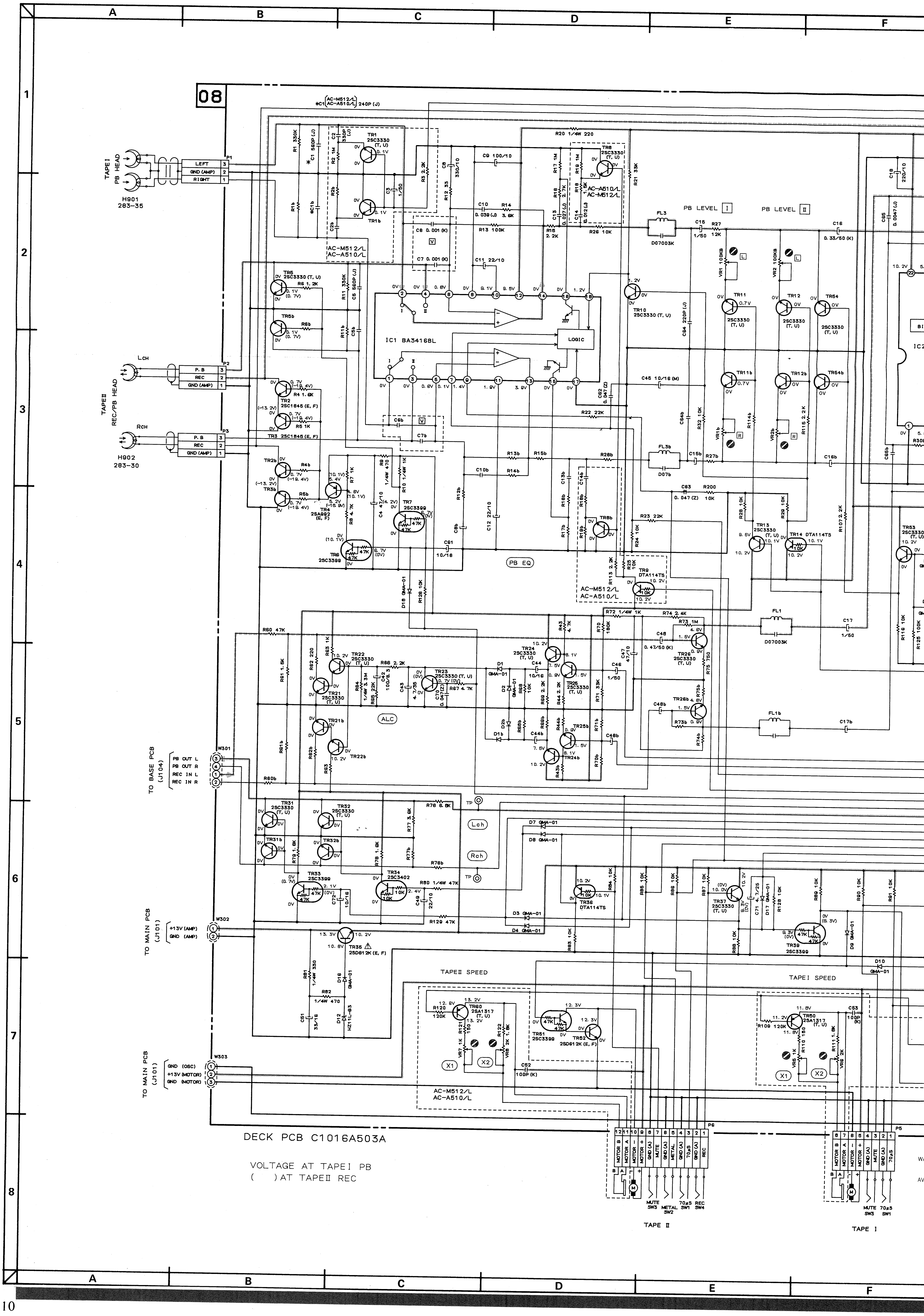
| IC | TR | | CONNECTOR |
|---|---|---|---|
| IC1 ···· E2 | TR1 ···· F1 | TR14 ···· E4 | J1 ···· C3 |
| IC2 ···· F4 | TR2 ···· F2 | TR15 ···· E4 | J104 ·· C2 |
| IC3 ···· D4 | TR4 ···· E1 | TR16 ···· D3 | J105 ·· B4 |
| IC101 ·· B1 | TR5 ···· E3 | TR17 ···· C3 | J106 ·· B4 |
| IC102 ·· B2 | TR6 ···· E3 | TR18 ···· D3 | J107 ·· A3 |
| IC103 ·· B3 | TR7 ···· E3 | TR101 ··· C2 | J201 ·· B3 |
| IC201 ·· B3 | TR8 ···· E3 | TR102 ··· C2 | J202 ·· A2 |
| IC202 ·· B2 | TR9 ···· E2 | TR103 ··· C4 | W201 ·· D4 |
| IC301 ·· A2 | TR10 ··· E2 | TR104 ··· C4 | W202 ·· D3 |
| | TR11 ··· E1 | TR105 ··· B4 | |
| | TR12 ··· E1 | TR106 ··· A4 | |
| | TR13 ··· D3 | TR107 ··· A4 | |

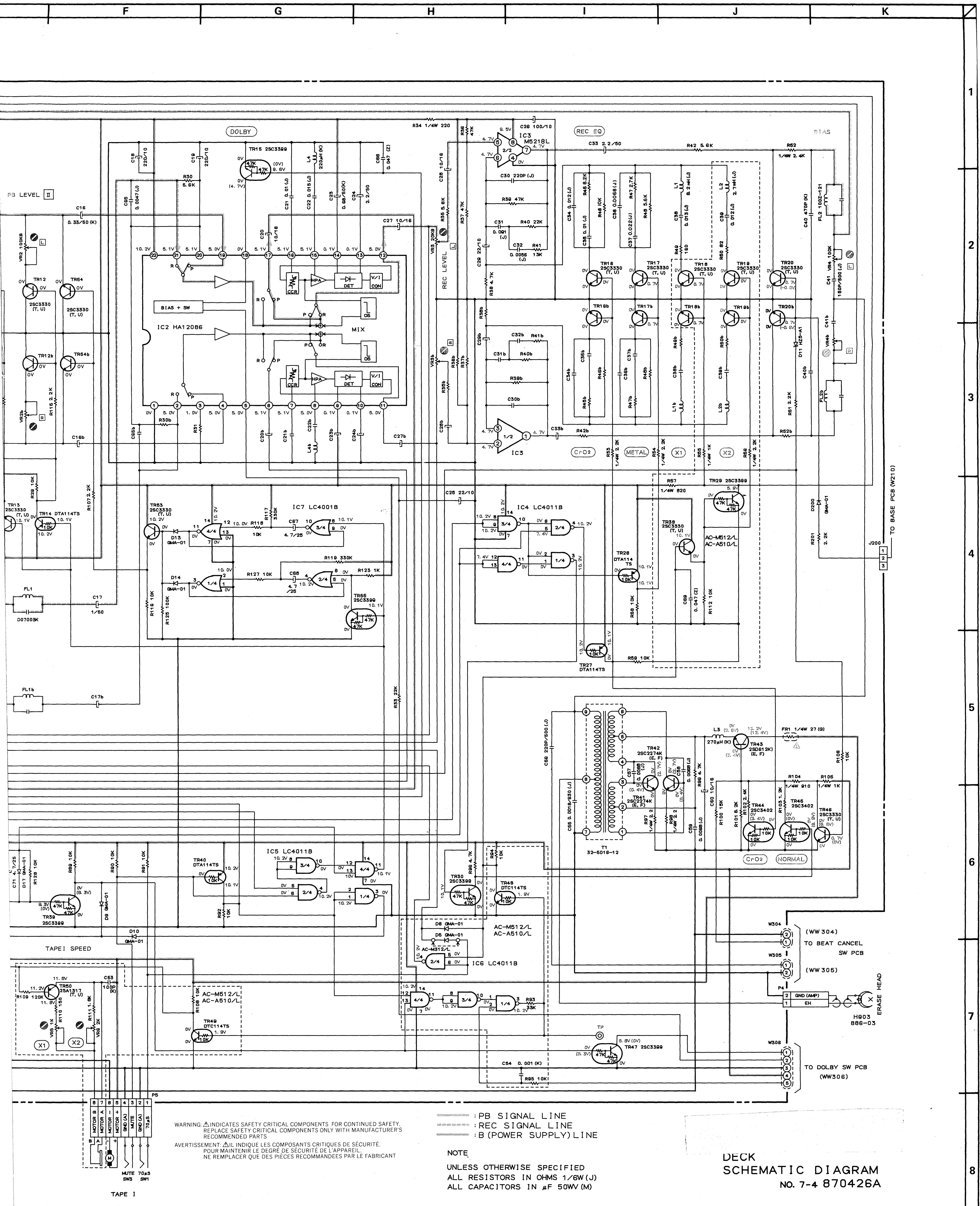
■●● ···· PNP TRANSISTOR
●●● ···· NPN TRANSISTOR
●●● ···· FET TRANSISTOR
S G D

TR1 ···· 2SC2878(A,B)
TR2 ···· 2SK161(Q,R)
TR4 ···· 2SC930(E,F)
TR5,TR7,TR13,TR14,TR15,TR18,TR106 ···· 2SC3330(T,U)
TR6,TR8,TR17 ···· 2SC3383(R,S)
TR9,TR10,TR104,TR105,TR107 ···· 2SA1317(S,T,U)
TR11,TR12 ···· 2SC3330(S,T,U)
TR16 ···· 2SK246(Q,R)
TR101,TR102,TR103 ···· 2SC3399

WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY,
REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S
RECOMMENDED PARTS

AVERTISSEMENT: ⚠IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ.
POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL,
NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT


08
TAPE I PB HEAD
H901 283-35
TAPE II REC/PB HEAD
H902 283-30
LCH
RCH
IC1 BA3416BL
LOGIC
PB LEVEL I
PB LEVEL II
PB EQ
ALC
TO BASE PCB (J104)
PB OUT L
PB OUT R
REC IN L
REC IN R
TO MAIN PCB (J101)
+13V (AMP)
GND (AMP)
GND (OSC)
+13V (MOTOR)
GND (MOTOR)
Lch
Rch
TAPE II SPEED
TAPE I SPEED
AC-M512/L
AC-A510/L
DECK PCB C1016A503A
VOLTAGE AT TAPE I PB
( ) AT TAPE II REC
MOTOR B
MOTOR A
MOTOR -
MOTOR +
MUTE
GND (A)
METAL
70µS
REC
MUTE SW3
METAL SW2
70µS SW1
REC SW4
TAPE II
TAPE I
A
B
C
D
E
F
1
2
3
4
5
6
7
8


F
G
H
I
J
K
1
2
3
4
5
6
7
8
DOLBY
REC EQ
BIAS
PB LEVEL II
REC LEVEL
IC2 HA12086
BIAS + SW
MIX
CCR
HPA
DET
V/I CON
IC3 M5218L
IC3
IC4 LC4011B
IC5 LC4011B
IC6 LC4011B
IC7 LC4001B
TR15 2SC3399
TR12 2SC3330 (T, U)
TR54 2SC3330 (T, U)
TR13 2SC3330 (T, U)
TR14 DTA114TS
TR53 2SC3330 (T, U)
TR55 2SC3399
TR16 2SC3330 (T, U)
TR17 2SC3330 (T, U)
TR18 2SC3330 (T, U)
TR19 2SC3330 (T, U)
TR20 2SC3330 (T, U)
TR29 2SC3399
TR38 2SC3330 (T, U)
TR28 DTA114TS
TR27 DTA114TS
AC-M512/L
AC-A510/L
AC-M312/L
CrO2
METAL
X1
X2
NORMAL
TR42 2SC2274K (E, F)
TR41 2SC2274K (E, F)
TR43 2SD612K (E, F)
TR44 2SC3402
TR45 2SC3402
TR46 2SC3330 (T, U)
T1 32-5018-12
FR1 1/4W 27 (G)
L3 270μH (K)
TR39 2SC3399
TR40 DTA114TS
TR30 2SC3399
TR48 DTC114TS
TR49 DTC114TS
TR50 2SA1317 (T, U)
TR47 2SC3399
TAPE I SPEED
FL1 D07003K
FL1b
TO BASE PCB (W210)
J200
W304
(WW304)
TO BEAT CANCEL SW PCB
W305
(WW305)
P4
GND (AMP)
EH
ERASE HEAD
H903 886-03
W306
TO DOLBY SW PCB (WW306)
TP
P5
MOTOR B
MOTOR A
MOTOR -
MOTOR +
GND (A)
MUTE
GND (A)
70μS
MUTE SW3
70μS SW1
TAPE I

WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY.
REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

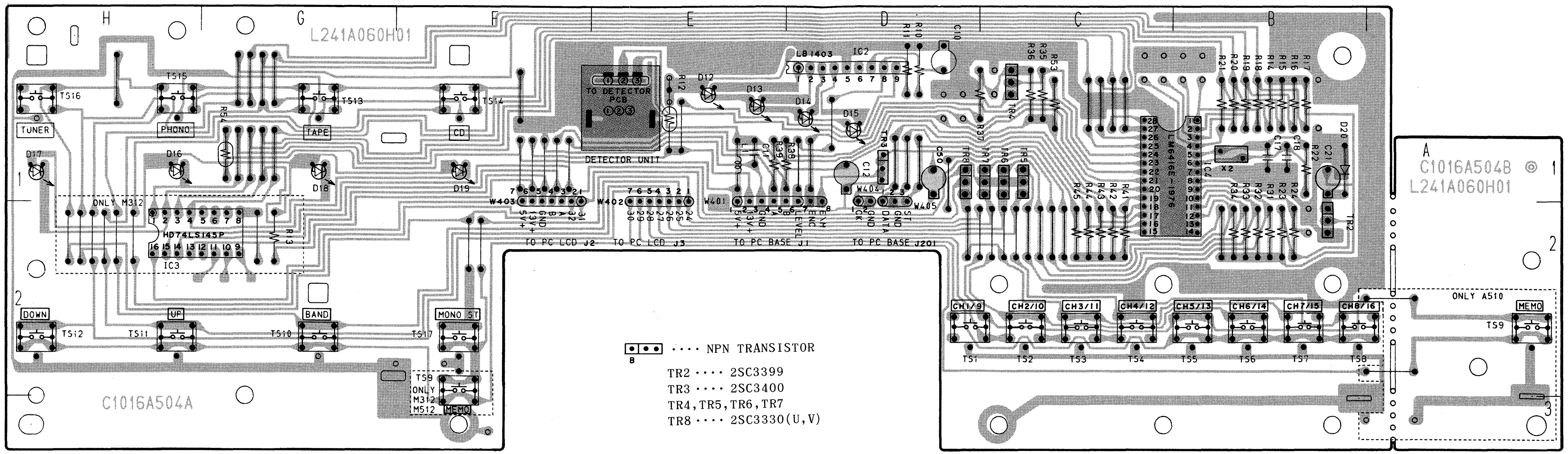
AVERTISSEMENT: ⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ.
POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL,
NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT

: PB SIGNAL LINE
: REC SIGNAL LINE
: B (POWER SUPPLY) LINE

NOTE

UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/6W (J)
ALL CAPACITORS IN μF 50WV (M)

DECK
SCHEMATIC DIAGRAM
NO. 7-4 870426A

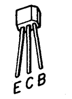

L241A060H01
C1016A504A
TUNER
PHONO
TAPE
CD
DOWN
UP
BAND
MONO ST
MEMO
TO DETECTOR PCB
DETECTOR UNIT
HD74LS145P
IC3
ONLY M312
IC2
IC1
W403
W402
W401
W404
W405
TO PC LCD J2
TO PC LCD J3
TO PC BASE J1
TO PC BASE J201
CH1/9
CH2/10
CH3/11
CH4/12
CH5/13
CH6/14
CH7/15
CH8/16
ONLY A510
C1016A504B
L241A060H01

**CONTROL PCB C1016A504A**

**MEMORY SW PCB C1016A504B**

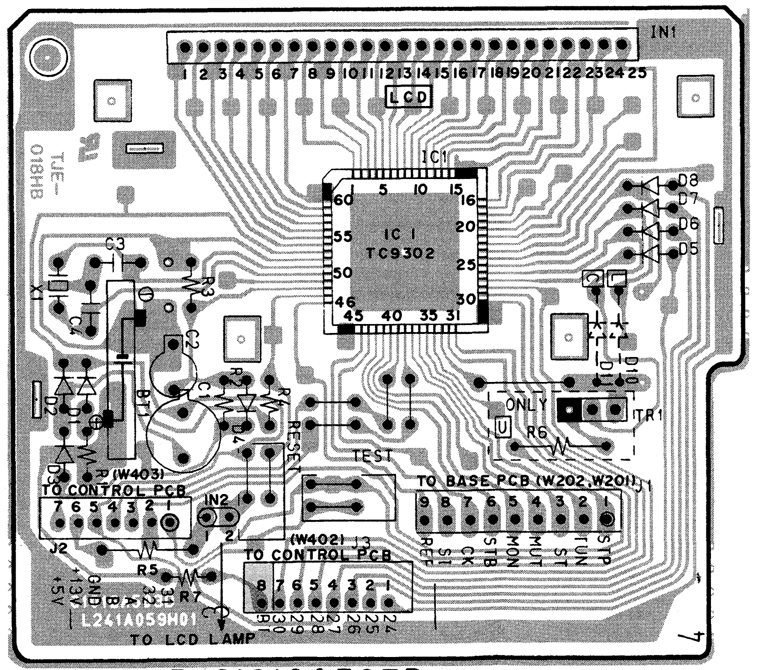
···· NPN TRANSISTOR

TR2 ···· 2SC3399
TR3 ···· 2SC3400
TR4,TR5,TR6,TR7
TR8 ···· 2SC3330(U,V)

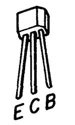


2SC3399
2SC3400
2SC3330(U,V)

Parts indicated ▒ are used for models AC- M512 / L and AC- A510 / L only.


IN1
LCD
IC1
IC 1 TC9302
TJE-018HB
D5
D6
D7
D8
D10
TR1
ONLY U
RESET
TEST
TO CONTROL PCB (W403) J2
TO CONTROL PCB (W402) J3
TO BASE PCB (W202,W201) J1
IN2
L241A059H01
TO LCD LAMP

**LCD PCB C1016A503D**



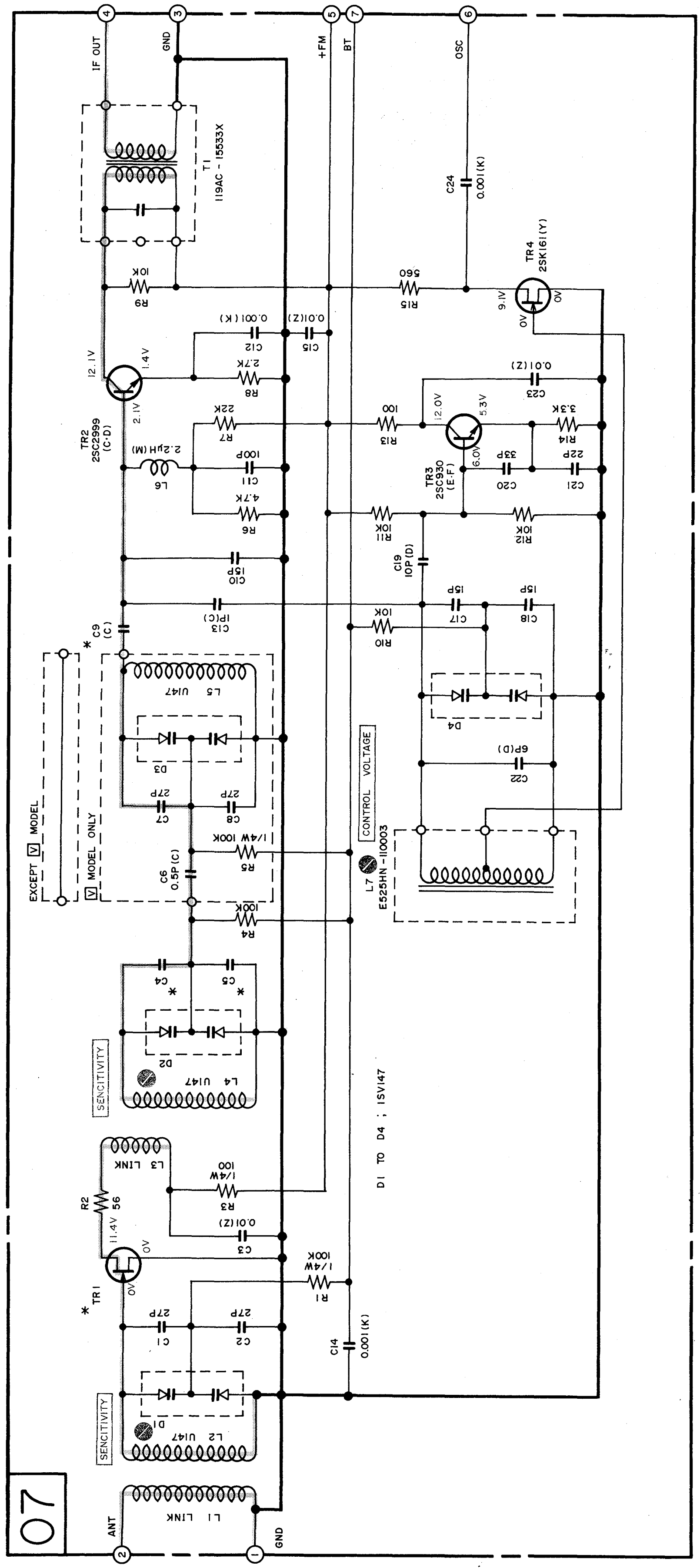
2SA1317(S,T,U)

Parts indicated ▒ are used for models AC- M512 / L and AC- A510 / L only.

TR1 ···· 2SA1317(S,T,U)
U ONLY

# FRONT END SCHEMATIC DIAGRAM

NO. 7-6 870428A


07
IF OUT
GND
+FM
BT
OSC
ANT
T1 119AC-15533X
TR2 2SC2999 (C·D)
TR3 2SC930 (E.F)
TR4 2SK161(Y)
TR1
L1 LINK
L2 U147
L3 LINK
L4 U147
L5 U147
L6 2.2μH(M)
L7 E525HN-110003
D1
D2
D3
D4
SENCITIVITY
CONTROL VOLTAGE
EXCEPT V MODEL
V MODEL ONLY
R1 100K 1/4W
R2 56
R3 100 1/4W
R4 100K
R5 100K 1/4W
R6 4.7K
R7 22K
R8 2.7K
R9 10K
R10 10K
R11 10K
R12 10K
R13 100
R14 3.3K
R15 560
C1 27P
C2 27P
C3 0.01(Z)
C4
C5
C6 0.5P(C)
C7 27P
C8 27P
C9 (C)
C10 15P
C11 100P
C12 0.001(K)
C13 1P(C)
C14 0.001(K)
C15 0.01(Z)
C17 15P
C18 15P
C19 10P(D)
C20 33P
C21 22P
C22 6P(D)
C23 0.01(Z)
C24 0.001(K)
12.1V
1.4V
2.1V
12.0V
5.3V
6.0V
9.1V
0V
11.4V
D1 TO D4 ; 1SV147

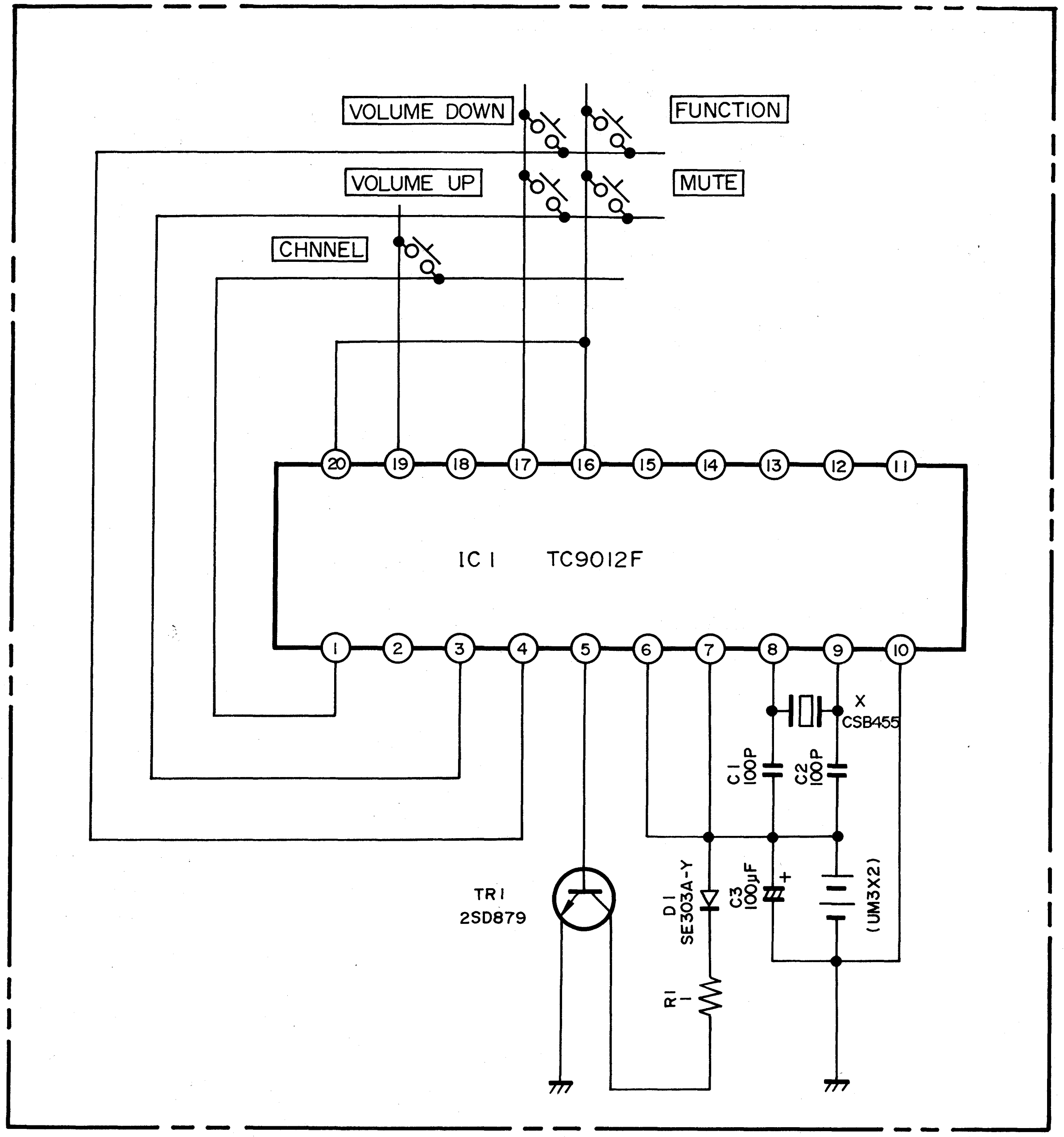
FRONT END PCB C1005B5040

= SIGNAL LINE

EXCEPT V MODEL --- FE31
V MODEL ---- FE41

NOTE
UNLESS OTHERWISE SPECIFIED;
ALL RESISTORS IN OHMS 1/6W(J)
ALL CAPACITORS IN uF 50WV(J)

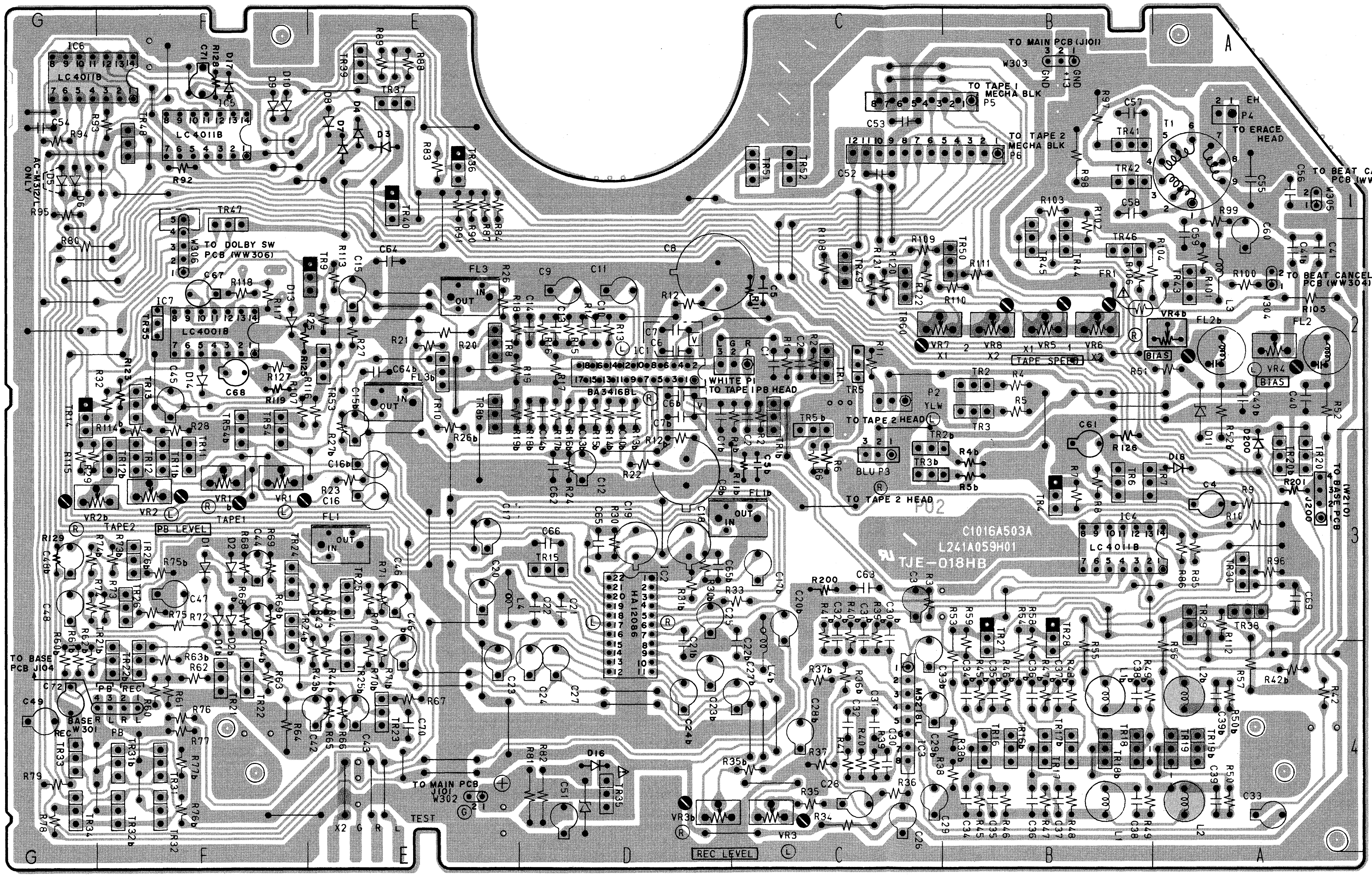
| * | TR1 | C4 | C5 | C9 |
|---|---|---|---|---|
| V | 2SK241(Y) | 33P | 33P | 5P |
| EXCEPT V | 2SK161 | 27P | 18P | 15P |


VOLUME DOWN
FUNCTION
VOLUME UP
MUTE
CHNNEL
IC1 TC9012F
20
19
18
17
16
15
14
13
12
11
1
2
3
4
5
6
7
8
9
10
X CSB455
C1 100P
C2 100P
TR1 2SD879
D1 SE303A-Y
C3 100μF
(UM3X2)
R1 1

MODEL AC-M512/L, AC-A510/L ONLY

# RC-S500
# REMOTE CONTROL UNIT SCHEMATIC DIAGRAM

NO. 7-7 870429A


TO MAIN PCB (J101)
W303
GND
TO TAPE 1 MECHA BLK
P5
TO TAPE 2 MECHA BLK
P6
TO ERACE HEAD
P4
EH
TO BEAT CANCEL SW PCB (WW305)
W305
TO BEAT CANCEL SW PCB (WW304)
W304
TO DOLBY SW PCB (WW306)
W306
AC-M312/L ONLY
IC6
LC4011B
IC5
IC7
LC4001B
IC1
BA3416BL
IC2
HA12086
IC3
M5218L
IC4
LC4011B
WHITE P1
TO TAPE 1 PB HEAD
TO TAPE 2 HEAD
YLW
P2
BLU P3
TAPE SPEED
BIAS
FL1
FL2
FL3
VR1
VR2
VR3
VR4
VR5
VR6
VR7
VR8
PB LEVEL
REC LEVEL
TAPE1
TAPE2
PB
REC
TO BASE PCB J104
BASE W301
TO MAIN PCB J101 W302
TEST
TO BASE PCB (W210)
J200
C1016A503A
L241A059H01
TJE-018HB
P02
A
B
C
D
E
F
G
1
2
3
4

## DECK PCB C1016A503A

LOCATION OF CONPONENT

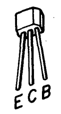
| IC | TR | | | | | | CONNECTOR |
|---|---|---|---|---|---|---|---|
| IC1 ···· D2 | TR1 ···· C2 | TR9 ···· E2 | TR18 ···· B4 | TR25 ···· E3 | TR34 ···· G4 | TR47 ···· F2 | P1 ···· C2 |
| IC2 ···· D4 | TR1b ··· C3 | TR10 ··· E2 | TR18b ··· A4 | TR25b ··· E4 | TR35 ···· D4 | TR48 ···· F1 | P2 ···· C2 |
| IC3 ···· C4 | TR2 ···· B2 | TR11 ··· F3 | TR19 ···· A4 | TR26 ···· F3 | TR36 ···· E1 | TR49 ···· C2 | P3 ···· C3 |
| IC4 ···· B3 | TR2b ··· C3 | TR11b ·· F3 | TR19b ··· A4 | TR26b ··· F3 | TR37 ···· E1 | TR50 ···· B2 | P4 ···· A1 |
| IC5 ···· F1 | TR3 ···· B2 | TR12 ··· F3 | TR20 ···· A3 | TR27 ···· B4 | TR38 ···· A3 | TR51 ···· C1 | P5 ···· C1 |
| IC6 ···· F1 | TR3b ··· C3 | TR12b ·· F3 | TR20b ··· A3 | TR28 ···· B4 | TR39 ···· E1 | TR52 ···· C1 | P6 ···· C1 |
| IC7 ···· F2 | TR4 ···· B3 | TR13 ··· F2 | TR21 ···· F4 | TR29 ···· A3 | TR40 ···· E1 | TR53 ···· E2 | W301 ·· F4 |
| | TR5 ···· C2 | TR14 ··· G2 | TR21b ··· F4 | TR30 ···· A3 | TR41 ···· B1 | TR54 ···· F2 | W302 ·· E4 |
| | TR5b ··· C3 | TR15 ··· D3 | TR22 ···· F4 | TR31 ···· F4 | TR42 ···· B1 | TR54b ··· F2 | W303 ·· B1 |
| | TR6 ···· B3 | TR16 ··· B4 | TR22b ··· F4 | TR31b ··· F4 | TR43 ···· A2 | TR55 ···· F2 | W304 ·· A2 |
| | TR7 ···· A3 | TR16b ·· B4 | TR23 ···· E4 | TR32 ···· F4 | TR44 ···· B2 | TR60 ···· C2 | W305 ·· A1 |
| | TR8 ···· E2 | TR17 ··· B4 | TR24 ···· F3 | TR32b ··· F4 | TR45 ···· B2 | | W306 ·· F2 |
| | TR8b ··· E2 | TR17b ·· B4 | TR24b ··· F4 | TR33 ···· G4 | TR46 ···· B2 | | J200 ·· A3 |

■●● ···· PNP TRANSISTOR

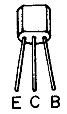
●●● ···· NPN TRANSISTOR

TR1,TR5,TR8,TR10,TR11
TR12,TR13,TR16,TR17
TR18,TR19,TR20,TR21
TR22,TR23,TR24,TR25
TR26,TR31,TR32,TR37
TR38,TR46,TR53,TR54
···· 2SC3330(T,U)

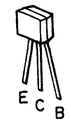
TR2,TR3 ···· 2SC1845(E,F)
TR4 ···· 2SA992(E,F)
TR6,TR7,TR15,TR29,TR30,TR39,TR47,TR51,TR55 ···· 2SC3399
TR9,TR14,TR27,TR28,TR36,TR40,TR48,TR49 ···· DTA114TS
TR33,TR34,TR44,TR45 ···· 2SC3402
TR35,TR43,TR52 ···· 2SD612K(E,F)
TR41,TR42 ···· 2SC2274K(F)



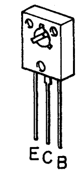
2SC3330(T,U)
2SC3399
2SC3402
2SA1317(S,T,U)



2SC1845(E,F)
2SA992(E,F)
2SC2274



DTA114TS



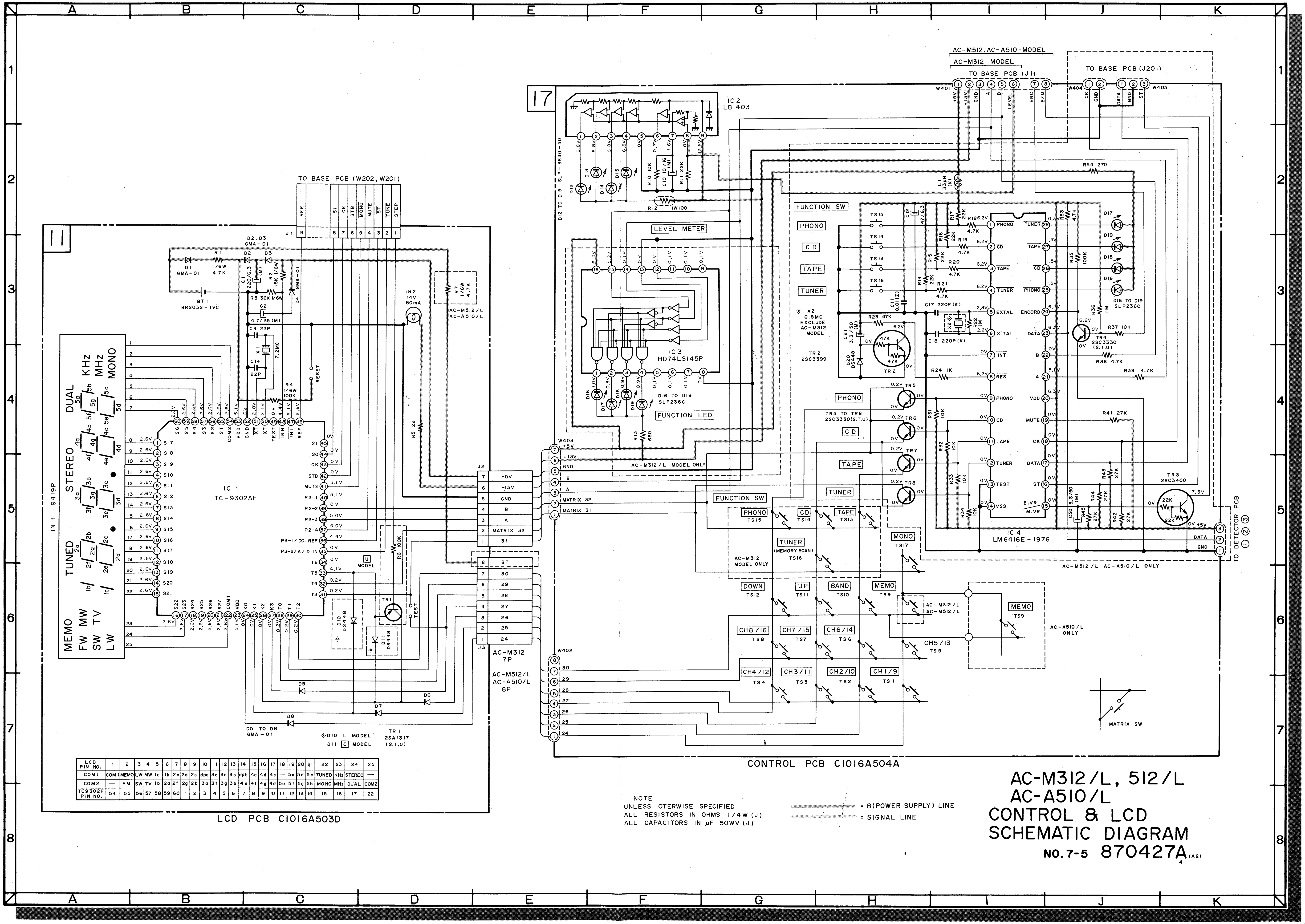
2SD612K(E,F)

Parts indicated----are used for models AC-M312/L ONLY.

Parts indicated ▨ are used for models AC- M512 / L and AC- A510 / L only.

WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT


A
B
C
D
E
F
G
H
I
J
K
1
2
3
4
5
6
7
8
11
17
TO BASE PCB (W202, W201)
REF
S1
CK
STB
MONO
MUTE
ST
TUNE
STEP
J1
D2, D3
GMA-01
D1
GMA-01
R1
1/6W
4.7K
BT1
BR2032-1VC
C1
220/6.3
R2
15K 1/6W
R3 36K 1/6W
D4 GMA-01
C2
4.7/35 (M)
C3 22P
X1
7.2MC
C14
22P
R4
1/6W
100K
RESET
IN2
14V
80mA
R7
1/6W
4.7K
AC-M512/L
AC-A510/L
R5 22
IN1 9419P
MEMO
FW MW
SW TV
LW
TUNED
STEREO
DUAL
KHz
MHz
MONO
IC1
TC-9302AF
S7
S8
S9
S10
S11
S12
S13
S14
S15
S16
S17
S18
S19
S20
S21
S1
S0
CK
STB
MUTE
P2-1
P2-2
P2-3
P2-4
P3-1/DC.REF
P3-2/A/D.IN
T6
T5
T4
T3
VDD
GND
XT
TEST
INH
INT
REF
COM1
COM2
K0
K1
K2
K3
T0
T1
T2
U
MODEL
R6
100K
TR1
TEST
D10
DS448
D11
DS448
D5
D6
D7
D8
D5 TO D8
GMA-01
※D10 L MODEL
D11 C MODEL
TR1
2SA1317
(S.T.U)
J2
+5V
+13V
GND
B
A
MATRIX 32
31
BT
30
29
28
27
26
25
24
J3
AC-M312
7P
AC-M512/L
AC-A510/L
8P
LCD PCB C1016A503D
IC2
LB1403
D12 TO D15 SLP-3840-50
D12
D13
D14
D15
R10 10K
C10 10/16 (M)
R11 22K
R12 1W 100
LEVEL METER
IC3
HD74LS145P
D16 TO D19
SLP236C
FUNCTION LED
R13
680
AC-M312/L MODEL ONLY
W403
W402
W401
W404
W405
AC-M512, AC-A510-MODEL
AC-M312 MODEL
TO BASE PCB (J1)
TO BASE PCB (J201)
+5V
+13V
GND
A
B
LEVEL
ENC
E/M
CK
GND
DATA
GND
ST
L1
33µH
(K)
FUNCTION SW
PHONO
CD
TAPE
TUNER
TS15
TS14
TS13
TS16
※ X2
0.8MC
EXCLUDE
AC-M312
MODEL
TR2
2SC3399
D20
DS448
C21
3.3/50
C12
47/6.3
C11
0.01(Z)
C17 220P (K)
C18 220P (K)
R14
R15
R16
R17
R18
R19
R20
R21
R22
R23 47K
R24 1K
TR5 TO TR8
2SC3330 (S.T.U)
TR5
TR6
TR7
TR8
R31
R32
R33
R34
IC4
LM6416E-1976
PHONO
CD
TAPE
TUNER
EXTAL
X'TAL
INT
RES
TEST
VSS
TUNER
TAPE
CD
PHONO
ENCORD
DATA
B
A
VDD
MUTE
CK
DATA
ST
E.VR
M.VR
R53
4.7K
R54 270
R35
100K
R36
1M
D17
D18
D19
D16
D16 TO D19
SLP236C
R37 10K
TR4
2SC3330
(S.T.U)
R38 4.7K
R39 4.7K
R41 27K
R42
R43
R44
R45
C50 3.3/50
TR3
2SC3400
+5V
DATA
GND
TO DETECTOR PCB
AC-M512/L AC-A510/L ONLY
TUNER
(MEMORY SCAN)
TS16
AC-M312
MODEL ONLY
MONO
TS17
DOWN
TS12
UP
TS11
BAND
TS10
MEMO
TS9
AC-M312/L
AC-M512/L
AC-A510/L
ONLY
CH8/16
TS8
CH7/15
TS7
CH6/14
TS6
CH5/13
TS5
CH4/12
TS4
CH3/11
TS3
CH2/10
TS2
CH1/9
TS1
MATRIX SW
CONTROL PCB C1016A504A

| LCD PIN NO. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COM1 | COM1 | MEMO | LW | MW | 1c | 1b | 2e | 2d | 2c | dpc | 3e | 3d | 3c | dpb | 4e | 4d | 4c | — | 5e | 5d | 5c | TUNED | KHz | STEREO | — |
| COM2 | — | FM | SW | TV | 1b | 2a | 2f | 2g | 2b | 3a | 3f | 3g | 3b | 4a | 4f | 4g | 4d | 5a | 5f | 5g | 5b | MONO | MHz | DUAL | COM2 |
| TC9302F PIN NO. | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 22 |

LCD PCB C1016A503D

CONTROL PCB C1016A504A

NOTE
UNLESS OTERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/4W (J)
ALL CAPACITORS IN µF 50WV (J)

= B(POWER SUPPLY) LINE
= SIGNAL LINE

# AC-M312/L, 512/L
# AC-A510/L
# CONTROL & LCD SCHEMATIC DIAGRAM

NO. 7-5 870427A4 (A2)